

the reasons set out in the Preamble, Part 280 of Title 40 of the Code of Federal Regulations is amended to read as follows

**Part 280 -- TECHNICAL STANDARDS AND CORRECTIVE ACTION REQUIREMENTS FOR OWNERS AND OPERATORS OF UNDERGROUND STORAGE TANKS**

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Authority 42 USC 6912, 6991, 6991(a), 6991(b), 6991(c); 6991(d), 6991(e), 6991(f), 6991(h)

#### Subpart A -- Program Scope and Interim Prohibition

##### § 280.10 Applicability.

(a) The requirements of this Part apply to all owners and operators of an UST system as defined in § 280.12 except as otherwise provided in paragraphs (b), (c), and (d) of this section. Any UST system listed in paragraph (c) of this section must meet the requirements of § 280.11

(b) The following UST systems are excluded from the requirements of this part.

(1) Any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, 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 Clean Water Act

(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 110 gallons or less

(5) Any UST system that contains a de minimus concentration of regulated substances

(6) Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

(c) Deferrals Subparts B, C, D, E, and G do not apply to any of the following types of UST systems

(1) Wastewater treatment tank systems,

(2) Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 USC 2011 and following),

(3) Any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR 50 Appendix A,

(4) Airport hydrant fuel distribution systems, and

(5) UST systems with field-constructed tanks

(d) Deferrals Subpart D does not apply to any UST system that stores fuel solely for use by emergency power generators

#### § 280.11 Interim Prohibition for deferred UST systems

(a) No person may install an UST system listed in § 280 10(c) for the purpose of storing regulated substances unless the UST system (whether of single- or double-wall construction)

(1) Will prevent releases due to corrosion or structural failure for the operational life of the UST system;

(2) Is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material, or designed in a manner to prevent the release or threatened release of any stored substance, and

(3) Is constructed or lined with material that is compatible with the stored substance.

(b) Notwithstanding paragraph (a) of this section, an UST system without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life. Owners and operators must maintain records that demonstrate compliance with the requirements of this paragraph for the remaining life of the tank.

[Note: The National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," may be used as guidance for complying with paragraph (b) of this section.]

#### § 280.12 Definitions.

"Aboveground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the aboveground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system.

"Ancillary equipment" means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST

"Belowground release" means any release to the subsurface of the land and to ground water. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank.

"Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

"Cathodic protection" is a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

"Cathodic protection tester" means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, such persons must have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

"Compatible" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the UST.

"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

"Consumptive use" with respect to heating oil means consumed on the premises.

"Corrosion expert" means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered 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.

"Dielectric material" means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (e.g., tank from piping)

"Electrical equipment" means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

"Excavation zone" means the volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

"Existing tank system" means a tank system used to contain an accumulation of regulated substances or for which installation has commenced on or before [insert date 90 days after date of publication]. Installation is considered to have commenced if

(1) the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system, and if,

(2)(a) either a continuous on-site physical construction or installation program has begun; or,

(b) the owner or operator has entered into contractual obligations--which cannot be cancelled or modified without substantial loss--for physical construction at the site or installation of the tank system to be completed within a reasonable time.

"Farm tank" is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property. "Farm" includes fish hatcheries, rangeland and nurseries with growing operations.

"Flow-through process tank" is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Free product" refers to a regulated substance that is present as a nonaqueous phase liquid (e.g., liquid not dissolved in water).

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

"Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980.

(but not including any substance regulated as a hazardous waste under subtitle C) or any mixture of such substances and petroleum, and which is not a petroleum UST system

"Heating oil" means petroleum that is No. 1, No. 2, No. 4--light, No. 4--heavy, No. 5--light, No. 5--heavy, and No. 6 technical grades of fuel oil, other residual fuel oils (including Navy Special Fuel Oil and Bunker C), and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

"Implementing agency" means EPA, or, in the case of a state with a program approved under section 9004 (or pursuant to a memorandum of agreement with EPA), the designated state or local agency responsible for carrying out an approved UST program.

"Liquid trap" means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

"Maintenance" means the normal operational upkeep to prevent an underground storage tank system from releasing product.

"Motor fuel" means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, and is typically used in the operation of a motor engine.

"New tank system" means a tank system that will be used to contain an accumulation of regulated substances and for which installation has commenced after [insert date 90 days after the date of publication] (See also "Existing Tank System").

"Noncommercial purposes" with respect to motor fuel means not for resale.

"On the premises where stored" with respect to heating oil means UST systems located on the same property where the stored heating oil is used.

"Operational life" refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under Subpart G.

"Operator" means any person in control of, or having responsibility for, the daily operation of the UST system.

"Overfill release" is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

"Owner" means (a) in the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of regulated substances, and (b) in the case of any UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States Government.

"Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimus quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

"Pipe" or "Piping" means a hollow cylinder or tubular conduit that is constructed of non-earthen materials.

"Pipeline facilities (including gathering lines)" are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

"Regulated substance" means (a) any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under subtitle C), and (b) petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). The term "regulated substance" includes but is not limited to petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

"Release" means any spilling, leaking, emitting, discharging, escaping, leaching or disposing from an UST into ground water, surface water or subsurface soils.

"Release detection" means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

"Repair" means to restore a tank or UST system component that has caused a release of product from the UST system.

"Residential tank" is a tank located on property used primarily for dwelling purposes.

"SARA" means the Superfund Amendments and Reauthorization Act of 1986.

"Septic tank" is a water-tight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

"Storm-water or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

"Surface impoundment" is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is not an injection well.

"Tank" is a stationary device designed to contain an accumulation of regulated substances and constructed of non-earthen materials (e.g., concrete, steel, plastic) that provide structural support.

"Underground area" means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

"Underground release" means any belowground release.

"Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. This term does not include any,

(a) Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes,

(b) Tank used for storing heating oil for consumptive use on the premises where stored,

(c) Septic tank,

(d) Pipeline facility (including gathering lines) regulated under

(1) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.), or

(2) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or

(3) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in paragraph (d)(1) or (d)(2) of this definition;

(e) Surface impoundment, pit, pond, or lagoon,



(f) Storm-water or wastewater collection system,

(g) Flow-through process tank,

(h) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations, or

(i) Storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor

The term "underground storage tank" or "UST" does not include any pipes connected to any tank which is described in paragraphs (a) through (i) of this definition.

"Upgrade" means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overflow controls to improve the ability of an underground storage tank system to prevent the release of product.

"UST system" or "Tank system" means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

"Wastewater treatment tank" means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

## **Subpart B -- UST Systems: Design, Construction, Installation and Notification**

### **§ 280.20 Performance standards for new UST systems.**

In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, all owners and operators of new UST systems must meet the following requirements:

(a) Tanks Each tank must be properly designed and constructed, and any portion underground that routinely contains product must be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(1) The tank is constructed of fiberglass-reinforced plastic, or

[Note: The following industry codes may be used to comply with paragraph (a)(1) of this section: Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products"; Underwriter's Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products", or American Society of Testing and Materials Standard D4021-86, "Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks"]

(2) The tank is constructed of steel and cathodically protected in the following manner:

(i) The tank is coated with a suitable dielectric material,

(ii) Field-installed cathodic protection systems are designed by a corrosion expert,

(iii) Impressed current systems are designed to allow determination of current operating status as required in § 280 31(c), and

(iv) Cathodic protection systems are operated and maintained in accordance with § 280 31 or according to guidelines established by the implementing agency, or

[Note The following codes and standards may be used to comply with paragraph (a)(2) of this section

(A) Steel Tank Institute "Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks",

(B) Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks",

(C) Underwriters Laboratories of Canada CAN4-S603-M85, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," and CAN4-G03.1-M85, "Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids," and CAN4-S631-M84, "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems", or

(D) National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids "]

(3) The tank is constructed of a steel-fiberglass-reinforced-plastic composite, or

[Note The following industry codes may be used to comply with paragraph (a)(3) of this section Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks," or the Association for Composite Tanks ACT-100, "Specification for the Fabrication of FRP Clad Underground Storage Tanks "]

(4) The tank is constructed of metal without additional corrosion protection measures provided that

(i) The tank is installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life, and

(ii) Owners and operators maintain records that demonstrate compliance with the requirements of paragraph (4)(i) for the remaining life of the tank, or

(5) The tank construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than paragraphs (a)(1) through (4) of this section

(b) Piping The piping that routinely contains regulated substances and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below

(1) The piping is constructed of fiberglass-reinforced plastic, or

[Note The following codes and standards may be used to comply with paragraph (b)(1) of this section

(A) Underwriters Laboratories Subject 971, "UL Listed Non-Metal Pipe",

(B) Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible and LP Gas",

(C) Underwriters Laboratories of Canada Guide ULC-107, "Glass Fiber Reinforced Plastic Pipe and Fittings for Flammable Liquids", and

(D) Underwriters Laboratories of Canada Standard CAN 4-S633-M81, "Flexible-Underground Hose Connectors "]

(2) The piping is constructed of steel and cathodically protected in the following manner

(i) The piping is coated with a suitable dielectric material,

(ii) Field-installed cathodic protection systems are designed by a corrosion expert,

(iii) Impressed current systems are designed to allow determination of current operating status as required in § 280 31(c), and

(iv) Cathodic protection systems are operated and maintained in accordance with § 280 31, or guidelines established by the implementing agency, or

[Note The following codes and standards may be used to comply with paragraph (b)(2)

(A) National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code",

(B) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems",

(C) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems", and

(D) National Association of Corrosion Engineers Standard RP-01-69, "Control of External Corrosion on Submerged Metallic Piping Systems"]

(3) The piping is constructed of metal without additional corrosion protection measures provided that

(i) The piping is installed at a site that is determined by a corrosion expert to not be corrosive enough to cause it to have a release due to corrosion during its operating life, and

(ii) Owners and operators maintain records that demonstrate compliance with the requirements of paragraph (3)(i) for the remaining life of the piping, or

[Note National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code", and National Association of Corrosion Engineers Standard RP-01-69, "Control of External Corrosion on Submerged Metallic Piping Systems," may be used to comply with paragraph (b)(3) of this section]

(4) The piping construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in paragraphs (b)(1) through (3) of this section

(c) Spill and overfill prevention equipment

(1) Except as provided in paragraph (2), to prevent spilling and overfilling associated with product transfer to the UST system, owners and operators must use the following spill and overfill prevention equipment

(i) Spill prevention equipment that will prevent release of product to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin), and

(ii) Overfill prevention equipment that will

(A) Automatically shut off flow into the tank when the tank is no more than 95 percent full, or

(B) Alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm

(2) Owners and operators are not required to use the spill and overfill prevention equipment specified in paragraph (1) if

(i) Alternative equipment is used that is determined by the implementing agency to be no less protective of human health and the environment than the equipment specified in paragraph (1)(i) or (ii) of this section, or

(ii) The UST system is filled by transfers of no more than 25 gallons at one time

(d) Installation All tanks and piping must be properly installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions

[Note Tank and piping system installation practices and procedures described in the following codes may be used to comply with the requirements of paragraph (d) of this section

(i) American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage System", or

(ii) Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems", or

(iii) American National Standards Institute Standard B31 3, "Petroleum Refinery Piping," and American National Standards Institute Standard B31 4 "Liquid Petroleum Transportation Piping System"]

(e) Certification of installation All owners and operators must ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with paragraph (d) of this section by providing a certification of compliance on the UST notification form in accordance with § 280.22

(1) The installer has been certified by the tank and piping manufacturers, or

(2) The installer has been certified or licensed by the implementing agency; or

(3) The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation, or

(4) The installation has been inspected and approved by the implementing agency, or

(5) All work listed in the manufacturer's installation checklists has been completed, or

(6) The owner and operator have complied with another method for ensuring compliance with paragraph (d) that is determined by the implementing agency to be no less protective of human health and the environment

#### § 280.21 Upgrading of existing UST systems

(a) Alternatives allowed Not later than [insert date 10 years and 90 days after date of publication], all existing UST systems must comply with one of the following requirements

(1) New UST system performance standards under § 280.20;

(2) The upgrading requirements in sections (b) through (d) below, or

(3) Closure requirements under Subpart G of this Part, including applicable requirements for corrective action under Subpart F

(b) Tank upgrading requirements Steel tanks must be upgraded to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory

(1) Interior lining A tank may be upgraded by internal lining if

(i) The lining is installed in accordance with the requirements of § 280.33, and

(ii) Within 10 years after lining, and every 5 years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications

(2) Cathodic protection A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements of § 280.20(a)(2)(ii), (iii), and (iv) and the integrity of the tank is ensured using one of the following methods.

(i) The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes prior to installing the cathodic protection system, or

(ii) The tank has been installed for less than 10 years and is monitored monthly for releases in accordance with § 280.43(d) through (h), or

(iii) The tank has been installed for less than 10 years and is assessed for corrosion holes by conducting two (2) tightness tests that meet the requirements of § 280.43(c) The first tightness test must be conducted prior to installing the cathodic protection system The second tightness test must be conducted between three (3) and six (6) months following the first operation of the cathodic protection system, or

(iv) The tank is assessed for corrosion holes by a method that is determined by the implementing agency to prevent releases in a manner that is no less protective of human health and the environment than subparagraphs (i) through (iii)

(3) Internal lining combined with cathodic protection A tank may be upgraded by both internal lining and cathodic protection if

(i) The lining is installed in accordance with the requirements of § 280.33, and

(ii) The cathodic protection system meets the requirements of § 280.20(a)(2)(ii), (iii), and (iv)

[Note The following codes and standards may be used to comply with this section

(A) American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks",

(B) National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection",

(C) National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems", and

(D) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"]

(c) Piping upgrading requirements Metal piping that routinely contains regulated substances and is in contact with the ground must be cathodically protected in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and must meet the requirements of § 280 20(b)(2)(ii), (iii), and (iv)

[Note The codes and standards listed in the note following § 280 20(b)(2) may be used to comply with this requirement ]

(d) Spill and overfill prevention equipment To prevent spilling and overfilling associated with product transfer to the UST system, all existing UST systems must comply with new UST system spill and overfill prevention equipment requirements specified in § 280 20(c)

#### § 280.22 Notification requirements.

(a) Any owner who brings an underground storage tank system into use after May 8, 1986, must within 30 days of bringing such tank into use, submit, in the form prescribed in Appendix I of this Part, a notice of existence of such tank system to the state or local agency or department designated in Appendix II of this Part to receive such notice

[Note Owners and operators of UST systems that were in the ground on or after May 8, 1986, unless taken out of operation on or before January 1, 1974, were required to notify the designated state or local agency in accordance with the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, on a form published by EPA on November 8, 1985 (50 FR 46602) unless notice was given pursuant to section 103(c) of CERCLA Owners and operators who have not complied with the notification requirements may use portions I through VI of the notification form contained in Appendix I of this Part ]

(b) In states where state law, regulations, or procedures require owners to use forms that differ from those set forth in Appendix I of this Part to fulfill the requirements of this section, the state forms may be submitted in lieu of the forms set forth in Appendix I of this Part If a state requires that its form be used in lieu of the form presented in this regulation, such form must meet the requirements of Section 9002

(c) Owners required to submit notices under paragraph (a) of this section must provide notices to the appropriate agencies or departments

identified in Appendix II of this Part for each tank they own. Owners may provide notice for several tanks using one notification form, but owners who own tanks located at more than one place of operation must file a separate notification form for each separate place of operation.

(d) Notices required to be submitted under paragraph (a) of this section must provide all of the information in Sections I through VI of the prescribed form (or appropriate state form) for each tank for which notice must be given. Notices for tanks installed after [insert 90 days after the date of publication of this rule] must also provide all of the information in Section VII of the prescribed form (or appropriate state form) for each tank for which notice must be given.

(e) All owners and operators of new UST systems must certify in the notification form compliance with the following requirements:

- (1) Installation of tanks and piping under § 280.20(e),
- (2) Cathodic protection of steel tanks and piping under § 280.20(a) and (b),
- (3) Financial responsibility under Subpart H of this Part, and
- (4) Release detection under §§ 280.41 and 280.42.

(f) All owners and operators of new UST systems must ensure that the installer certifies in the notification form that the methods used to install the tanks and piping comply with the requirements in § 280.20(d).

(g) Beginning [insert 30 days after date of publication], any person who sells a tank intended to be used as an underground storage tank must notify the purchaser of such tank of the owner's notification obligations under paragraph (a) of this section. The form provided in Appendix III of this part may be used to comply with this requirement.

#### Subpart C -- General Operating Requirements

##### § 280.30 Spill and overfill control.

(a) Owners and operators must ensure that releases due to spilling or overfilling do not occur. The owner and operator must ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

[Note: The transfer procedures described in National Fire Protection Association Publication 385 may be used to comply with paragraph (a) of this section. Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code."]

(b) The owner and operator must report, investigate, and clean up any spills and overfills in accordance with § 280.53.



### § 280.31 Operation and maintenance of corrosion protection.

All owners and operators of steel UST systems with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances

(a) All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground

(b) All UST systems equipped with cathodic protection systems must be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements

(1) Frequency All cathodic protection systems must be tested within 6 months of installation and at least every 3 years thereafter or according to another reasonable time frame established by the implementing agency, and

(2) Inspection criteria The criteria that are used to determine that cathodic protection is adequate as required by this section must be in accordance with a code of practice developed by a nationally recognized association.

[Note National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," may be used to comply with paragraph (b)(2) of this section ]

(c) UST systems with impressed current cathodic protection systems must also be inspected every 60 days to ensure the equipment is running properly

(d) For UST systems using cathodic protection, records of the operation of the cathodic protection must be maintained (in accordance with § 280.34) to demonstrate compliance with the performance standards in this section. These records must provide the following

(1) The results of the last three inspections required in paragraph (c) of this section, and

(2) The results of testing from the last two inspections required in paragraph (b) of this section

### § 280.32 Compatibility

Owners and operators must use an UST system made of or lined with materials that are compatible with the substance stored in the UST system

[Note Owners and operators storing alcohol blends may use the following codes to comply with the requirements of this section

(A) American Petroleum Institute Publication 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations", and

(B) American Petroleum Institute Publication 1627, "Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations "]

#### § 280 33 Repairs allowed.

Owners and operators of UST systems must ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. The repairs must meet the following requirements

(a) Repairs to UST systems must be properly conducted in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

[Note The following codes and standards may be used to comply with paragraph (a) of this section: National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code", American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquified Petroleum Gas, and Product Pipelines", American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks", and National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection."]

(b) Repairs to fiberglass-reinforced plastic tanks may be made by the manufacturer's authorized representatives or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

(c) Metal pipe sections and fittings that have released product as a result of corrosion or other damage must be replaced. Fiberglass pipes and fittings may be repaired in accordance with the manufacturer's specifications.

(d) Repaired tanks and piping must be tightness tested in accordance with § 280 43(c) and § 280 44(b) within 30 days following the date of the completion of the repair except as provided in paragraphs (1) through (3), below.

(1) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory, or

(2) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in § 280 43(d) through (h), or

(3) Another test method is used that is determined by the implementing agency to be no less protective of human health and the environment than those listed above.

(e) Within 6 months following the repair of any cathodically protected UST system, the cathodic protection system must be tested in accordance with § 280 31(b) and (c) to ensure that it is operating properly

(f) UST system owners and operators must maintain records of each repair for the remaining operating life of the UST system that demonstrate compliance with the requirements of this section

#### § 280.34 Reporting and recordkeeping

Owners and operators of UST systems must cooperate fully with inspections, monitoring and testing conducted by the implementing agency, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to section 9005 of Subtitle I of the Resource Conservation and Recovery Act, as amended

(Note The recordkeeping and reporting requirements listed below have been approved by the Office of Management and Budget and have been assigned OMB Control No 2050-0068 )

(a) Reporting Owners and operators must submit the following information to the implementing agency

(1) Notification for all UST systems (§ 280 22), which includes certification of installation for new UST systems (§ 280 20(e)),

(2) Reports of all releases including suspected releases (§ 280 50), spills and overfills (§ 280 53), and confirmed releases (§ 280 61),

(3) Corrective actions planned or taken including initial abatement measures (§ 280 62), initial site characterization (§ 280 63), free product removal (§ 280 64), investigation of soil and ground-water cleanup (§ 280 65), and corrective action plan (§ 280 66), and

(4) A notification before permanent closure or change-in-service (§ 280 71)

(b) Recordkeeping Owners and operators must maintain the following information

(1) A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used (§ 280 20(a)(4), § 280 20(b)(3))

(2) Documentation of operation of corrosion protection equipment (§ 280 31),

(3) Documentation of UST system repairs (§ 280 33(f)),

(4) Recent compliance with release detection requirements (§ 280 45), and

(5) Results of the site investigation conducted at permanent closure (§ 280 74)

(c) Availability and Maintenance of Records Owners and operators must keep the records required either

(1) At the UST site and immediately available for inspection by the implementing agency, or

(2) At a readily available alternative site and be provided for inspection to the implementing agency upon request

[Note In the case of permanent closure records required under § 280 74, owners and operators are also provided with the additional alternative of mailing closure records to the implementing agency if they cannot be kept at the site or an alternative site as indicated above ]

#### Subpart D -- Release Detection

##### § 280.40 General requirements for all UST systems.

(a) Owners and operators of new and existing UST systems must provide a method, or combination of methods, of release detection that

(1) Can detect a release from any portion of the tank and the connected underground piping that routinely contains product,

(2) Is installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition, and

(3) Meets the performance requirements in § 280 43 or 280 44, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer In addition, methods used after [insert date 2 years and 90 days after publication of the final regulations] except for methods permanently installed prior to that date, must be capable of detecting the leak rate or quantity specified for that method in § 280 43(b), (c), and (d) or 280 44(a) and (b) with a probability of detection of 0 95 and a probability of false alarm of 0 05

(b) When a release detection method operated in accordance with the performance standards in § 280 43 and § 280 44 indicates a release may have occurred, owners and operators must notify the implementing agency in accordance with Subpart E.

(c) Owners and operators of all UST systems must comply with the release detection requirements of this Subpart by [insert month and day 90 days after publication of final regulations] of the year listed in the following table

[INSERT TABLE HERE ]

(d) Any existing UST system that cannot apply a method of release detection that complies with the requirements of this Subpart must complete the closure procedures in Subpart G by the date on which release detection is required for that UST system under paragraph (c)

# Schedule for Phase-in of Release Detection

Year System Was  
Installed

Year When Release Detection is Required (by  
[insert the month and day that is 90 days after  
publication date of the final regulations] of the  
year indicated)

	1989	1990	1991	1992	1993
Before 1965 or date unknown	RD	P			
1965 -1969		P/RD			
1970-1974		P	RD		
1975-1979		P		RD	
1980-1988		P			RD

New tanks  
(after [insert date 90  
days after  
publication of  
final regulations])

Immediately upon installation

P= Must begin release detection for all pressurized piping in accordance  
with § 280.41(b)(1) and § 280.42(b)(4)

RD= Must begin release detection for tanks and suction piping in accordance  
with § 280.41(a), § 280.41(b)(2), and § 280.42

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## § 280.41 Requirements for petroleum UST systems.

Owners and operators of petroleum UST systems must provide release detection for tanks and piping as follows

(a) Tanks Tanks must be monitored at least every 30 days for releases using one of the methods listed in § 280 43 (d)-(h) except that

(1) UST systems that meet the performance standards in § 280 20 or § 280 21, and the monthly inventory control requirements in § 280 43(a) or (b), may use tank tightness testing (conducted in accordance with § 280 43(c)) at least every 5 years until [insert date 10 years and 90 days after publication of the final regulation], or until 10 years after the tank is installed or upgraded under § 280 21(b), whichever is later,

(2) UST systems that do not meet the performance standards in § 280 20 or § 280 21 may use monthly inventory controls (conducted in accordance with § 280 43(a) or (b)) and annual tank tightness testing (conducted in accordance with § 280 43(c)) until [insert date 10 years and 90 days after publication of the final regulation] when the tank must be upgraded under § 280 21 or permanently closed under § 280 71, and

(3) Tanks with capacity of 550 gallons or less may use weekly tank gauging (conducted in accordance with § 280 43(b)).

(b) Piping Underground piping that routinely contains regulated substances must be monitored for releases in a manner that meets one of the following requirements.

(1) Pressurized piping Underground piping that conveys regulated substances under pressure must

(i) Be equipped with an automatic line leak detector conducted in accordance with § 280 44(a); and

(ii) Have an annual line tightness test conducted in accordance with § 280 44(b) or have monthly monitoring conducted in accordance with § 280.44(c)

(2) Suction piping Underground piping that conveys regulated substances under suction must either have a line tightness test conducted at least every 3 years and in accordance with § 280 44(b), or use a monthly monitoring method conduct in accordance with § 280 44(c) No release detection is required for suction piping that is designed and constructed to meet the following standards

(i) The below-grade piping operates at less than atmospheric pressure,

(ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released,

(iii) Only one check valve is included in each suction line,

(iv) The check valve is located directly below and as close as practical to the suction pump, and

(v) A method is provided that allows compliance with subparagraphs (ii)-(iv) to be readily determined

#### § 280.42 Requirements for hazardous substance UST systems.

Owners and operators of hazardous substance UST systems must provide release detection that meets the following requirements

(a) Release detection at existing UST systems must meet the requirements for petroleum UST systems in § 280.41. By [insert date 10 years and 90 days after publication of the final regulation], all existing hazardous substance UST systems must meet the release detection requirements for new systems in paragraph (b) below

(b) Release detection at new hazardous substance UST systems must meet the following requirements

(1) Secondary containment systems must be designed, constructed and installed to

(i) Contain regulated substances released from the tank system until they are detected and removed,

(ii) Prevent the release of regulated substances to the environment at any time during the operational life of the UST system, and

(iii) Be checked for evidence of a release at least every 30 days

[Note The provisions of 40 CFR 265.193, Containment and Detection of Releases, may be used to comply with these requirements ]

(2) Double-walled tanks must be designed, constructed, and installed to

(i) Contain a release from any portion of the inner tank within the outer wall, and

(ii) Detect the failure of the inner wall

(3) External liners (including vaults) must be designed, constructed, and installed to

(i) Contain 100 percent of the capacity of the largest tank within its boundary,

(ii) Prevent the interference of precipitation or ground-water intrusion with the ability to contain or detect a release of regulated substances, and

(iii) Surround the tank completely (i.e., it is capable of preventing lateral as well as vertical migration of regulated substances)



(4) Underground piping must be equipped with secondary containment that satisfies the requirements of paragraph (b)(1) above (e.g., trench liners, jacketing of double-walled pipe). In addition, underground piping that conveys regulated substances under pressure must be equipped with an automatic line leak detector in accordance with § 280.44(a).

(5) Other methods of release detection may be used if owners and operators

(i) Demonstrate to the implementing agency that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in §§ 280.43(b)-(h) can detect a release of petroleum;

(ii) Provide information to the implementing agency on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site, and,

(iii) Obtain approval from the implementing agency to use the alternate release detection method before the installation and operation of the new UST system.

#### **§ 280.43 Methods of release detection for tanks.**

Each method of release detection for tanks used to meet the requirements of § 280.41 must be conducted in accordance with the following:

(a) Inventory control. Product inventory control (or another test of equivalent performance) must be conducted monthly to detect a release of at least 10 percent of flow-through plus 130 gallons on a monthly basis in the following manner:

(1) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day,

(2) The equipment used is capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth of an inch,

(3) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery,

(4) Deliveries are made through a drop tube that extends to within one foot of the tank bottom,

(5) Product dispensing is metered and recorded within the local standards for meter calibration or an accuracy of 6 cubic inches for every 5 gallons of product withdrawn, and

(6) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month.

[Note: Practices described in the American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at

Retail Outlets," may be used, where applicable, as guidance in meeting the requirements of this paragraph ]

(b) Manual tank gauging Manual tank gauging must meet the following requirements

(1) Tank liquid level measurements are taken at the beginning and ending of a period of at least 36 hours during which no liquid is added to or removed from the tank,

(2) Level measurements are based on an average of two consecutive stick readings at both the beginning and ending of the period,

(3) The equipment used is capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth of an inch,

(4) A leak is suspected and subject to the requirements of Subpart E if the variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table

<u>Nominal Tank Capacity</u>	<u>Weekly Standard (one test)</u>	<u>Monthly Standard (average of four tests)</u>
550 gallons or less	10 gallons	5 gallons
551-1,000 gallons	13 gallons	7 gallons
1,001-2,000 gallons	26 gallons	13 gallons

(5) Only tanks of 550 gallons or less nominal capacity may use this as the sole method of release detection. Tanks of 551 to 2,000 gallons may use the method in place of manual inventory control in § 280.43(a). Tanks of greater than 2,000 gallons nominal capacity may not use this method to meet the requirements of this subpart.

(c) Tank tightness testing Tank tightness testing (or another test of equivalent performance) must be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank that routinely contains product while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(d) Automatic tank gauging Equipment for automatic tank gauging that tests for the loss of product and conducts inventory control must meet the following requirements:

(1) The automatic product level monitor test can detect a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains product, and

(2) Inventory control (or another test of equivalent performance) is conducted in accordance with the requirements of § 280.43(a).

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

(1) The materials used as backfill are sufficiently porous (e g , gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area,

(2) The stored regulated substance, or a tracer compound placed in the tank system, is sufficiently volatile (e g , gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank,

(3) The measurement of vapors by the monitoring device is not rendered inoperative by the ground water, rainfall, or soil moisture or other known interferences so that a release could go undetected for more than 30 days,

(4) The level of background contamination in the excavation zone will not interfere with the method used to detect releases from the tank,

(5) The vapor monitors are designed and operated to detect any significant increase in concentration above 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,

(6) In the UST excavation zone, the site is assessed to ensure compliance with the requirements in paragraphs (e)(1)-(4) of this section and to establish the number and positioning of monitoring wells that will detect releases within the excavation zone from any portion of the tank that routinely contains product, and

(7) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering

(f) Ground-water monitoring Testing or monitoring for liquids on the ground water must meet the following requirements

(1) The regulated substance stored is immiscible in water and has a specific gravity of less than one,

(2) Ground water is never more than 20 feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (e g , the soil should consist of gravels, coarse to medium sands, coarse silts or other permeable materials),

(3) The slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of regulated substance on the water table into the well under both high and low ground-water conditions,

(4) Monitoring wells shall be sealed from the ground surface to the top of the filter pack,

(5) Monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible,

(6) The continuous monitoring devices or manual methods used can detect the presence of at least one-eighth of an inch of free product on top of the ground water in the monitoring wells,

(7) Within and immediately below the UST system excavation zone, the site is assessed to ensure compliance with the requirements in paragraphs (f)(1)-(5) of this section and to establish the number and positioning of monitoring wells or devices that will detect releases from any portion of the tank that routinely contains product, and

(8) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering

(g) Interstitial monitoring Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains product and also meets one of the following requirements

(1) For double-walled UST systems, the sampling or testing method can detect a release through the inner wall in any portion of the tank that routinely contains product,

[Note: The provisions outlined in the Steel Tank Institute's "Standard for Dual Wall Underground Storage Tanks" may be used as guidance for aspects of the design and construction of underground steel double-walled tanks ]

(2) For UST systems with a secondary barrier within the excavation zone, the sampling or testing method used can detect a release between the UST system and the secondary barrier,

(i) The secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (at least  $10^{-6}$  cm/sec for the regulated substance stored) to direct a release to the monitoring point and permit its detection,

(ii) The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier allowing a release to pass through undetected,

(iii) For cathodically protected tanks, the secondary barrier must be installed so that it does not interfere with the proper operation of the cathodic protection system,

(iv) The ground water, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a release could go undetected for more than 30 days,

(v) The site is assessed to ensure that the secondary barrier is always above the ground water and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions, and,

(vi) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering

(3) For tanks with an internally fitted liner, an automated device can detect a release between the inner wall of the tank and the liner, and the liner is compatible with the substance stored

(h) Other methods Any other type of release detection method, or combination of methods, can be used if

(i) It can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within a month with a probability of detection of 0.95 and a probability of false alarm of 0.05, or

(ii) The implementing agency may approve another method if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in paragraphs (c)-(h). In comparing methods, the implementing agency shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner and operator must comply with any conditions imposed by the implementing agency on its use to ensure the protection of human health and the environment.

#### **§ 280.44 Methods of release detection for piping.**

Each method of release detection for piping used to meet the requirements of § 280.41 must be conducted in accordance with the following:

(a) Automatic line leak detectors Methods which 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 1 hour. An annual test of the operation of the leak detector must be conducted in accordance with the manufacturer's requirements.

(b) Line tightness testing A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure.

(c) Applicable tank methods Any of the methods in § 280.43(e)-(h) may be used if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

#### **§ 280.45 Release detection recordkeeping**

All UST system owners and operators must maintain records in accordance with § 280.34 demonstrating compliance with all applicable requirements of this Subpart. These records must include the following:

(a) All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, must be maintained for 5 years, or for another reasonable period of time determined by the implementing agency, from the date of installation,

(b) The results of any sampling, testing, or monitoring must be maintained for at least 1 year, or for another reasonable period of time determined by the implementing agency, except that the results of tank tightness testing conducted in accordance with § 280.43(c) must be retained until the next test is conducted, and

(c) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site must be maintained for at least one year after the servicing work is completed, or for another reasonable time period determined by the implementing agency. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer must be retained for 5 years from the date of installation.

## **Subpart E -- Release Reporting, Investigation, and Confirmation**

### **§ 280.50 Reporting of suspected releases**

Owners and operators of UST systems must report to the implementing agency within 24 hours, or another reasonable time period specified by the implementing agency, and follow the procedures in § 280.52 for any of the following conditions:

(a) The discovery by owners and operators 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 and utility lines, and nearby surface water)

(b) Unusual operating conditions observed by owners and operators (such as the erratic behavior of product dispensing equipment, the sudden loss of product from the UST system, 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, and,

(c) Monitoring results from a release detection method required under § 280.41 and § 280.42 that indicate a release may have occurred unless

(1) 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

(2) In the case of inventory control, a second month of data does not confirm the initial result.

### **§ 280.51 Investigation due to off-site impacts**

When required by the implementing agency, owners and operators of UST systems must follow the procedures in § 280.52 to determine if the UST system 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 and utility lines, and nearby surface and drinking waters) that has been observed by the implementing agency or brought to its attention by another party.

§ 280.52 Release investigation and confirmation steps.

Unless corrective action is initiated in accordance with Subpart F, owners and operators must immediately investigate and confirm all suspected releases of regulated substances requiring reporting under § 280.50 within 7 days, or another reasonable time period specified by the implementing agency, using either the following steps or another procedure approved by the implementing agency

(a) System test Owners and operators must conduct tests (according to the requirements for tightness testing in § 280.43(c) and § 280.44(b)) that determine whether a leak exists in that portion of the tank that routinely contains product, or the attached delivery piping, or both

(1) Owners and operators must repair, replace or upgrade the UST system, and begin corrective action in accordance with Subpart F 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 system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release

(3) Owners and operators must conduct a site check as described in paragraph (b) of this section 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

(b) Site check Owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the nature of the stored substance, the type of initial alarm or cause for suspicion, the type of backfill, the depth of ground water, and other factors appropriate for identifying the presence and source of the release

(1) If the test results for the excavation zone or the UST site indicate that a release has occurred, owners and operators must begin corrective action in accordance with Subpart F,

(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

§ 280.53 Reporting and cleanup of spills and overfills.

(a) Owners and operators of UST systems must contain and immediately clean up a spill or overfill and report to the implementing agency within 24 hours, or another reasonable time period specified by the implementing agency, and begin corrective action in accordance with Subpart F in the following cases

(1) Spill or overfill of petroleum that results in a release to the environment that exceeds 25 gallons or another reasonable amount specified by the implementing agency, or that causes a sheen on nearby surface water, and

(2) Spill or overfill of a hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under CERCLA (40 CFR 302)

(b) Owners and operators of UST systems must contain and immediately clean up a spill or overfill of petroleum that is less than 25 gallons or another reasonable amount specified by the implementing agency, and a spill or overfill of a hazardous substance that is less than the reportable quantity if cleanup cannot be accomplished within 24 hours, or another reasonable time period established by the implementing agency, owners and operators must immediately notify the implementing agency

[Note A release of a hazardous substance equal to or in excess of its reportable quantity must also be reported immediately (rather than within 24 hours) to the National Response Center under sections 102 and 103 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and to appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986 ]

#### **Subpart F -- Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances**

##### **§ 280.60 General.**

Owners and operators of petroleum or hazardous substance UST systems must, in response to a confirmed release from the UST system, comply with the requirements of this subpart except for USTs excluded under § 280.10(b) and UST systems subject to RCRA Subtitle C corrective action requirements under section 3004(u) of the Resource Conservation and Recovery Act, as amended

##### **§ 280.61 Initial response.**

Upon confirmation of a release in accordance with § 280.52 or after a release from the UST system is identified in any other manner, owners and operators must perform the following initial response actions within 24 hours of a release or within another reasonable period of time determined by the implementing agency

(a) Report the release to the implementing agency (e.g., by telephone or electronic mail),

(b) Take immediate action to prevent any further release of the regulated substance into the environment, and

(c) Identify and mitigate fire, explosion, and vapor hazards

##### **§ 280.62 Initial abatement measures and site check**

(a) Unless directed to do otherwise by the implementing agency, owners and operators must perform the following abatement measures

(1) Remove as much of the regulated substance from the UST system as is necessary to prevent further release to the environment,



(2) Visually inspect any aboveground releases or exposed belowground releases and prevent further migration of the released substance into surrounding soils and ground water,

(3) 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),

(4) 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 and operator must comply with applicable state and local requirements,

(5) Measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with the site check required by § 280.52(b) or the closure site assessment of § 280.72(a). In selecting sample types, sample locations, and measurement methods, the owner and operator must consider the nature of the stored substance, the type of backfill, depth to ground water and other factors as appropriate for identifying the presence and source of the release, and

(6) Investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with § 280.64

(b) Within 20 days after release confirmation, or within another reasonable period of time determined by the implementing agency, owners and operators must submit a report to the implementing agency summarizing the initial abatement steps taken under paragraph (a) and any resulting information or data

#### § 280.63 Initial site characterization.

(a) Unless directed to do otherwise by the implementing agency, owners and operators must assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in § 280.60 and § 280.61. This information must include, but is not necessarily limited to the following

(1) Data on the nature and estimated quantity of release,

(2) Data from available sources and/or site investigations concerning the following factors: surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use,

(3) Results of the site check required under § 280.62(a)(5), and

(4) Results of the free product investigations required under § 280.62(a)(6), to be used by owners and operators to determine whether free product must be recovered under § 280.64

(b) Within 45 days of release confirmation or another reasonable period of time determined by the implementing agency, owners and operators must submit the information collected in compliance with paragraph (a) of this section to the implementing agency in a manner that demonstrates its applicability and technical adequacy, or in a format and according to the schedule required by the implementing agency

#### **§ 280.64 Free product removal**

At sites where investigations under § 280 62(a)(6) indicate the presence of free product, owners and operators must remove free product to the maximum extent practicable as determined by the implementing agency while continuing, as necessary, any actions initiated under §§ 280 61 through 280 63, or preparing for actions required under §§ 280 65 through 280 66. In meeting the requirements of this section, owners and operators must

(a) Conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, state and federal regulations,

(b) Use abatement of free product migration as a minimum objective for the design of the free product removal system,

(c) Handle any flammable products in a safe and competent manner to prevent fires or explosions, and

(d) Unless directed to do otherwise by the implementing agency, prepare and submit to the implementing agency, within 45 days after confirming a release, a free product removal report that provides at least the following information

(1) The name of the person(s) responsible for implementing the free product removal measures,

(2) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations,

(3) The type of free product recovery system used,

(4) Whether any discharge will take place on-site or off-site during the recovery operation and where this discharge will be located,

(5) The type of treatment applied to, and the effluent quality expected from, any discharge,

(6) The steps that have been or are being taken to obtain necessary permits for any discharge, and

(7) The disposition of the recovered free product.

#### **§ 280.65 Investigations for soil and ground-water cleanup**

(a) In order to determine the full extent and location of soils contaminated by the release and the presence and concentrations of dissolved product contamination in the ground water, owners and operators must conduct investigations of the release, the release site, and the surrounding area possibly affected by the release if any of the following conditions exist

(1) There is evidence that ground-water wells have been affected by the release (e g , as found during release confirmation or previous corrective action measures),

(2) Free product is found to need recovery in compliance with § 280 64,

(3) There is evidence that contaminated soils may be in contact with ground water (e g , as found during conduct of the initial response measures or investigations required under §§ 280 60 through 280 64), and

(4) The implementing agency requests an investigation, based on the potential effects of contaminated soil or ground water on nearby surface water and ground-water resources

(b) Owners and operators must submit the information collected under paragraph (a) of this section as soon as practicable or in accordance with a schedule established by the implementing agency

#### § 280.66 Corrective action plan.

(a) At any point after reviewing the information submitted in compliance with § 280 61 through § 280 63, the implementing agency may require owners and operators to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and ground water. If a plan is required, owners and operators must submit the plan according to a schedule and format established by the implementing agency. Alternatively, owners and operators may, after fulfilling the requirements of § 280 61 through § 280 63, choose to submit a corrective action plan for responding to contaminated soil and ground water. In either case, owners and operators are responsible for submitting a plan that provides for adequate protection of human health and the environment as determined by the implementing agency, and must modify their plan as necessary to meet this standard.

(b) The implementing agency will approve the corrective action plan only after ensuring that implementation of the plan will adequately protect human health, safety, and the environment. In making this determination, the implementing agency should consider the following factors as appropriate:

(1) The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration,

(2) The hydrogeologic characteristics of the facility and the surrounding area,

(3) The proximity, quality, and current and future uses of nearby surface water and ground water,

(4) The potential effects of residual contamination on nearby surface water and ground water,

(5) An exposure assessment, and

(6) Any information assembled in compliance with this subpart

(c) Upon approval of the corrective action plan or as directed by the implementing agency, owners and operators must implement the plan, including modifications to the plan made by the implementing agency. They must monitor, evaluate, and report the results of implementing the plan in accordance with a schedule and in a format established by the implementing agency

(d) Owners and operators may, in the interest of minimizing environmental contamination and promoting more effective cleanup, begin cleanup of soil and ground water before the corrective action plan is approved provided that they

(1) Notify the implementing agency of their intention to begin cleanup,

(2) Comply with any conditions imposed by the implementing agency, including halting cleanup or mitigating adverse consequences from cleanup activities, and

(3) Incorporate these self-initiated cleanup measures in the corrective action plan that is submitted to the implementing agency for approval

#### § 280.67 Public participation.

(a) For each confirmed release that requires a corrective action plan, the implementing agency must provide notice to the public by means designed to reach those members of the public directly affected by the release and the planned corrective action. This notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, publication in a state register, letters to individual households, or personal contacts by field staff.

(b) The implementing agency must ensure that site release information and decisions concerning the corrective action plan are made available to the public for inspection upon request

(c) Before approving a corrective action plan, the implementing agency may hold a public meeting to consider comments on the proposed corrective action plan if there is sufficient public interest, or for any other reason

(d) The implementing agency must give public notice that complies with paragraph (a) above if implementation of an approved corrective action plan does not achieve the established cleanup levels in the plan and termination of that plan is under consideration by the implementing agency

## Subpart G -- Out-of-Service UST Systems and Closure

### § 280.70 Temporary closure

(a) When an UST system is temporarily closed, owners and operators must continue operation and maintenance of corrosion protection in accordance with § 280.31, and any release detection in accordance with Subpart D. Subparts E and F must be complied with if a release is suspected or confirmed. However, release detection is not required as long as the UST system is empty. 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.

(b) When an UST system is temporarily closed for 3 months or more, owners and operators must also comply with the following requirements:

(1) Leave vent lines open and functioning, and

(2) Cap and secure all other lines, pumps, manways, and ancillary equipment.

(c) When an UST system is temporarily closed for more than 12 months, owners and operators must permanently close the UST system if it does not meet either performance standards in § 280.20 for new UST systems or the upgrading requirements in § 280.21, except that the spill and overfill equipment requirements do not have to be met. Owners and operators must permanently close the substandard UST systems at the end of this 12-month period in accordance with §§ 280.71-280.74, unless the implementing agency provides an extension of the 12-month temporary closure period. Owners and operators must complete a site assessment in accordance with § 280.72 before such an extension can be applied for.

### § 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) below, 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.

(b) To permanently close a tank, owners and operators must empty and clean it by removing all liquids and accumulated sludges. All tanks taken out of service permanently must also be either removed from the ground or filled it with an inert solid material.

(c) Continued use of an UST system to store a non-regulated substance is considered a change-in-service. Before a change-in-service, owners and operators must empty and clean the tank by removing all liquid and accumulated sludge and conduct a site assessment in accordance with § 280.72.

[Note The following cleaning and closure procedures may be used to comply with this section

(A) American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks",

(B) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks",

(C) American Petroleum Institute Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," may be used as guidance for compliance with this section, and

(D) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard Working in Confined Space" may be used as guidance for conducting safe closure procedures at some hazardous substance tanks ]

#### § 280.72 Assessing the site at closure or change-in-service

(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release. The requirements of this section are satisfied if one of the external release detection methods allowed in § 280.43(e) and (f) is operating in accordance with the requirements in § 280.43 at the time of closure, and indicates no release has occurred.

(b) If contaminated soils, contaminated ground water, or free product as a liquid or vapor is discovered under paragraph (a), or by any other manner, owners and operators must begin corrective action in accordance with Subpart F.

#### § 280.73 Applicability to previously closed UST systems

When directed by the implementing agency, the owner and operator of an UST system permanently closed before [insert date 90 days after publication date of this rule] must assess the excavation zone and close the UST system in accordance with this Subpart if releases from the UST may, in the judgment of the implementing agency, pose a current or potential threat to human health and the environment.

#### § 280.74 Closure records.

Owners and operators must maintain records in accordance with § 280.34 that are capable of demonstrating compliance with closure requirements under this Subpart. The results of the excavation zone assessment required in § 280.72 must be maintained for at least 3 years after completion of permanent closure or change-in-service in one of the following ways:

(a) By the owners and operators who took the UST system out of service,

(b) By the current owners and operators of the UST system site, or

(c) By mailing these records to the implementing agency if they cannot be maintained at the closed facility

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## Notification for Underground Storage Tanks

L.D. Number

STATE USE ONLY

Date Received

## GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1980, or that are brought into use after May 8, 1980. The information required is required by Section 9002 of the Resource Conservation and Recovery Act (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or in the absence of such records, your knowledge, belief, or recollection.

**What Must Notify?** Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that were regulated substances that have been designated State or local agencies of the substance of their tanks. Owners must (a) in the case of an underground storage tank in use on November 8, 1980, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and

(b) in the case of any underground storage tank in use before November 8, 1980, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

**What Tanks Are Included?** Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of regulated substances, and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. gasoline used on, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fungicides.

**What Tanks Are Excluded?** Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:

1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumption use on the premises where used;
3. septic tanks;

4. petroleum facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979 or which is an offshore petroleum facility regulated under State law;

5. surface impoundments, pits, ponds, or lagoons;

6. waste water or waste water collection systems;

7. flow-through process tanks;

8. liquid trash or associated gathering lines directly related to oil or gas production and gathering operations;

9. storage tanks situated in an underground area (such as a basement, cellar, storeroom, drift, vault, or tunnel) if the storage tank is situated upon or above the surface of the floor.

**What Substances Are Covered?** The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in Section 104 (14) of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is mixed at standard conditions of temperature and pressure (68 degrees Fahrenheit and 14.7 pounds per square inch absolute).

**Where To Notify?** Completed notification forms should be sent to the address given at the top of this page.

**When To Notify?** 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1980. 2. Owners who bring underground storage tanks into use after May 8, 1980, must notify within 30 days of bringing the tank into use.

**Penalties:** Any owner who knowingly fails to notify or submits false information shall be subject to a civil penalty not to exceed \$10,000 for each tank for which notification is not given or for which false information is submitted.

## INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. This form must be completed for each location containing underground storage tanks. If more than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form.

Indicate number of continuation sheets attached

Owner Name (Corporation, Individual, Public Agency or Other Entity)

Street Address

County

City

State

ZIP Code

Area Code

Phone Number

Type of Owner (Mark all that apply ☒)

☐ Current

☐ State or Local Gov't

☐ Private or Corporate

☐ Former

☐ Federal Gov't (GSA facility L.D. no. \_\_\_\_\_)

☐ Ownership uncertain

(If same as Section I, mark box here ☐)

Facility Name or Company Site Identifier as applicable

Street Address or State Road, as applicable

County

City (nearest)

State

ZIP Code

Indicate number of tanks at this location

Mark box here if tank(s) are located on land within an Indian reservation or other Indian trust lands ☐

Name (If same as Section I, mark box here ☐)

Job Title

Area Code

Phone Number

☐ Mark box here only if this is an amended or subsequent notification for this location.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative

Signature

Date Signed

CONTINUE ON REVERSE SIDE

Tank Identification No. (e.g., ABC 123), or Arbitrarily Assigned Sequential Number (e.g., 123)	Tank No.	Tank No.	Tank No.	Tank No.	Tank No.
<b>1. Status of Tank</b> (Mark all that apply) <input type="checkbox"/> Currently in Use <input type="checkbox"/> Temporarily Out of Use <input type="checkbox"/> Permanently Out of Use <input type="checkbox"/> Brought into Use after 5/8/86	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Estimated Age (Years)</b>					
<b>3. Estimated Total Capacity (Gallons)</b>					
<b>4. Material of Construction</b> (Mark one) <input type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Fiberglass Reinforced Plastic <input type="checkbox"/> Unknown <input type="checkbox"/> Other Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5. Internal Protection</b> (Mark all that apply) <input type="checkbox"/> Cathodic Protection <input type="checkbox"/> Interior Lining (e.g., epoxy resins) <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/> Other Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>6. External Protection</b> (Mark all that apply) <input type="checkbox"/> Cathodic Protection <input type="checkbox"/> Painted (e.g., asphaltic) <input type="checkbox"/> Fiberglass Reinforced Plastic Coated <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/> Other Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7. Piping</b> (Mark all that apply) <input type="checkbox"/> Bare Steel <input type="checkbox"/> Galvanized Steel <input type="checkbox"/> Fiberglass Reinforced Plastic <input type="checkbox"/> Cathodically Protected <input type="checkbox"/> Unknown <input type="checkbox"/> Other Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>8. Substance Currently or Last Stored in Greatest Quantity by Volume</b> (Mark all that apply) <input type="checkbox"/> a. Empty <input type="checkbox"/> b. Petroleum <input type="checkbox"/> Diesel <input type="checkbox"/> Kerosene <input type="checkbox"/> Gasoline (including alcohol blends) <input type="checkbox"/> Used Oil <input type="checkbox"/> Other Please Specify _____ <input type="checkbox"/> c. Hazardous Substance Please Indicate Name of Principal CERCLA Substance OR Chemical Abstract Service (CAS) No. <input type="checkbox"/> Mark box <input type="checkbox"/> if tank stores a mixture of substances <input type="checkbox"/> d. Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>9. Additional Information (for tanks permanently taken out of service)</b> <input type="checkbox"/> a. Estimated date last used (mo/yr) <input type="checkbox"/> b. Estimated quantity of substance remaining (gal) <input type="checkbox"/> c. Mark box <input type="checkbox"/> if tank was filled with inert material (e.g., sand, concrete)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII CERTIFICATION OF COMPLIANCE (COMPLETE FOR ALL NEW TANKS AT THIS LOCATION)

0 Installation (mark all that apply)

- ☐ The installer has been certified by the tank and piping manufacturers
  - ☐ The installer has been certified or licensed by the implementing agency
  - ☐ The installation has been inspected and certified by a registered professional engineer
  - ☐ The installation has been inspected and approved by the implementing agency
  - ☐ All work listed on the manufacturer's installation checklists has been completed
  - ☐ Another method was used as allowed by the implementing agency Please specify
- 

1 Release Detection (mark all that apply)

- ☐ Manual tank gauging
  - ☐ Tank tightness testing with inventory controls
  - ☐ Automatic tank gauging
  - ☐ Vapor monitoring
  - ☐ Ground-water monitoring
  - ☐ Interstitial monitoring within a secondary barrier
  - ☐ Interstitial monitoring within secondary containment
  - ☐ Automatic line leak detectors
  - ☐ Line tightness testing
  - ☐ Another method allowed by the implementing agency Please specify
-

Corrosion Protection (if applicable)

- ☐ As specified for coated steel tanks with cathodic protection
- ☐ As specified for coated steel piping with cathodic protection
- ☐ Another method allowed by the implementing agency Please specify

\_\_\_\_\_

I have financial responsibility in accordance with Subpart I Please specify

Method \_\_\_\_\_

Insurer \_\_\_\_\_

Policy Number \_\_\_\_\_

OATH I certify that the information concerning installation provided in Item 10 is true to the best of my belief and knowledge

Installer \_\_\_\_\_

Name Date

\_\_\_\_\_

Position

\_\_\_\_\_

Company

## APPENDIX II - LIST OF AGENCIES DESIGNATED TO RECEIVE NOTIFICATIONS

### Alabama (EPA Form)

Alabama Department of Environmental  
Management  
Ground Water Section/Water Division  
1751 Congressman W L Dickinson Drive  
Montgomery, Alabama 36130  
205/271-7823

### Alaska (EPA Form)

Department of Environmental Conservation  
Box 0  
Juneau, Alaska 99811-1800  
970/465-2653

### American Samoa (EPA Form)

Executive Secretary  
Environmental Quality Commission  
Office of the Governor  
American Samoan Government  
Pago Pago, American Samoa 96799  
Attention. UST Notification

### Arizona (EPA Form)

Attention UST Coordinator  
Arizona Department of Environmental Quality  
Environmental Health Services  
2005 N Central  
Phoenix, Arizona 85004

### Arkansas (EPA Form)

Arkansas Department of Pollution  
Control and Ecology  
P O Box 9583  
Little Rock, Arkansas 72219  
501/562-7444

### California (State Form)

Executive Director  
State Water Resources Control Board  
P O Box 100  
Sacramento, California 95801  
916/445-1533

### Colorado (EPA Form)

Section Chief  
Colorado Department of Health  
Waste Management Division  
Underground Tank Program  
4210 East 11th Avenue  
Denver, Colorado 80220  
303/320-8333

Connecticut (State Form)  
Hazardous Materials Management Unit  
Department of Environmental Protection  
State Office Building  
165 Capitol Avenue  
Hartford, Connecticut 06106

Delaware (State Form)  
Division of Air and Waste Management  
Department of Natural Resources and  
Environmental Control  
P O Box 1401  
89 Kings Highway  
Dover, Delaware 19903  
302/726-5409

District of Columbia (EPA Form)  
Attention UST Notification Form  
Department of Consumer and Regulatory  
Affairs  
Pesticides and Hazardous Waste Management  
Branch  
Room 114  
5010 Overlook Avenue, SW  
Washington, D.C 20032

Florida (State Form)  
Florida Department of Environmental Regulation  
Solid Waste Section  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399  
904/487-4398

Georgia (EPA Form)  
Georgia Department of Natural Resources  
Environmental Protection Division  
Underground Storage Tank Program  
3420 Norman Berry Drive, 7th Floor  
Hapeville, Georgia 30354  
404/656-7404

Guam (State Form)  
Administrator  
Guam Environmental Protection Agency  
P O Box 2999  
Agana, Guam 96910  
Overseas Operator (Commercial call 646-8863)

**Hawaii (EPA Form)**  
Administrator, Hazardous Waste Program  
645 Halekauwila Street  
Honolulu, Hawaii 96813  
808/548-2270

**Idaho (EPA Form)**  
Underground Storage Tank Coordinator  
Water Quality Bureau  
Division of Environmental Quality  
Idaho Department of Health and Welfare  
450 W State Street  
Boise, Idaho 83720  
208/334-4251

**Illinois (EPA Form)**  
Underground Storage Tank Coordinator  
Division of Fire Prevention  
Office of State Fire Marshal  
3150 Executive Park Drive  
Springfield, Illinois 62703-4599

**Indiana (EPA Form)**  
Underground Storage Tank Program  
Office of Environmental Response  
Indiana Department of Environmental  
Management  
105 South Meridian Street  
Indianapolis, Indiana 46225

**Iowa (State Form)**  
UST Coordinator  
Iowa Department of Natural Resources  
Henry A Wallace Building  
900 East Grand  
Des Moines, Iowa 50219  
512/281-8135

**Kansas (EPA Form)**  
Kansas Department of Health and Environment  
Forbes Field, Building 740  
Topeka, Kansas 66620  
913/296-1594

**Kentucky (State Form)**  
Department for Environmental Protection  
Hazardous Waste Branch  
Fort Boone Plaza, Building #2  
18 Reilly Road  
Frankfort, Kentucky 40601  
501/564-6716

**Louisiana (State Form)**  
Secretary, Louisiana Department of  
Environmental Quality  
P O Box 44066  
Baton Rouge, Louisiana 70804  
501/342-1265

**Maine (State Form)**  
Attention Underground Tanks Program  
Bureau of Oil and Hazardous Material Control  
Department of Environmental Protection  
State House - Station 17  
Augusta, Maine 04333

**Maryland (EPA Form)**  
Science and Health Advisory Group  
Office of Environmental Programs  
201 West Preston Street  
Baltimore, Maryland 21201

**Massachusetts (EPA Form)**  
UST Registry, Department of Public Safety  
1010 Commonwealth Avenue  
Boston, Massachusetts 02215  
617/566-4500

**Michigan (EPA Form)**  
Michigan Department of State Police  
Fire Marshal Division  
General Office Building  
7150 Harris Drive  
Lansing, Michigan 48913

**Minnesota (State Form)**  
Underground Storage Tank Program  
Division of Solid and Hazardous Wastes  
Minnesota Pollution Control Agency  
520 West Lafayette Road  
St. Paul, Minnesota 55155

**Mississippi (State Form)**  
Department of Natural Resources  
Bureau of Pollution Control  
Underground Storage Tank Section  
P O Box 10385  
Jackson, Mississippi 39209  
601/961-5171

**Missouri (EPA Form)**  
UST Coordinator  
Missouri Department of Natural Resources  
P O Box 176  
Jefferson City, Missouri 65102  
314/751-7428



Montana (EPA Form)  
Solid and Hazardous Waste Bureau  
Department of Health and Environmental  
Science  
Cogswell Bldg - Room B-201  
Helena, Montana 59620

Nebraska (EPA Form)  
Nebraska State Fire Marshal  
P O Box 94677  
Lincoln, Nebraska 68509-4677  
402/471-9465

Nevada (EPA Form)  
Attention UST Coordinator  
Division of Environmental Protection  
Department of Conservation and Natural  
Resources  
Capitol Complex 201 S Fall Street  
Carson City, Nevada 89710  
800/992-0900, Ext 4670  
702/885-4670

New Hampshire (EPA Form)  
NH Dept of Environmental Services  
Water Supply and Pollution Control Division  
Hazen Drive  
P O Box 95  
Concord, New Hampshire 03301  
Attention. UST Registration

New Jersey (State Form)  
Underground Storage Tank Coordinator  
Department of Environmental Protection  
Division of Water Resources (CN-029)  
Trenton, New Jersey 08625  
609/292-0424

New Mexico (EPA Form)  
New Mexico Environmental Improvement  
Division  
Groundwater/Hazardous Waste Bureau  
P O Box 968  
Santa Fe, New Mexico 87504  
505/827-2933

New York (EPA Form)  
Bulk Storage Section  
Division of Water  
Department of Environmental Conservation  
50 Wolf Road, Room 326  
Albany, New York 12233-0001  
518/457-4351

North Carolina (EPA Form)  
Division of Environmental Management  
Ground-Water Operations Branch  
Department of Natural Resources and  
Community Development  
P O Box 27687  
Raleigh, North Carolina 27611  
919/733-3221

North Dakota (State Form)  
Division of Hazardous Management  
and Spectral Studies  
North Dakota Department of Health  
Box 5520  
Bismarck, North Dakota 58502-5520

Northern Mariana Islands (EPA Form)  
Chief, Division of Environmental Quality  
P O Box 1304  
Commonwealth of Northern Mariana Islands  
Saipan, CM 96950  
Cable Address Gov NMI Saipan  
Overseas Operator 6984

Ohio (State Form)  
State Fire Marshal's Office  
Department of Commerce  
8895 E Main Street  
Reynoldsburg, Ohio 43068  
State Hotline. 800/282-1927

Oklahoma (EPA Form)  
Underground Storage Tank Program  
Oklahoma Corporation Comm  
Jim Thorpe Building  
Oklahoma City, Oklahoma 73105

Oregon (State Form)  
Underground Storage Tank Program  
Hazardous and Solid Waste Division  
Department of Environmental Quality  
811 S W Sixth Avenue  
Portland, Oregon 98204  
503/229-5788

Pennsylvania (EPA Form)  
PA Department of Environmental Resources  
Bureau of Water Quality Management  
Ground Water Unit  
9th Floor Fulton Building  
P O Box 2063  
Harrisburg, Pennsylvania 17120

Puerto Rico (EPA Form)  
Director, Water Quality Control Area  
Environmental Quality Board  
Commonwealth of Puerto Rico  
Santurce, Puerto Rico  
809/725-0717

Rhode Island (EPA Form)  
UST Registration  
Department of Environmental Management  
83 Park Street  
Providence, Rhode Island 02903  
401/277-2234

South Carolina (State Form)  
Ground-Water Protection Division  
South Carolina Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201  
803/758-5213

South Dakota (EPA Form)  
Office of Water Quality  
Department of Water and Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

Tennessee (EPA Form)  
Tennessee Department of Health  
and Environment  
Division of Superfund Underground Storage  
Tank Section  
150 Ninth Avenue, North  
Nashville, Tennessee 37219-5404  
615/741-0690

Texas (EPA Form)  
Underground Storage Tank Program  
Texas Water Commission  
P O Box 13087  
Austin, Texas 78711

Utah (EPA Form)  
Division of Environmental Health  
P O Box 45500  
Salt Lake City, Utah 84145-0500

Vermont (State Form)  
Underground Storage Tank Program  
Vermont AEC/Waste Management Division  
State Office Building  
Montpelier, Vermont 05602  
802/828-3395

Virginia (EPA Form)  
Virginia Water Control Board  
P O Box 11143  
Richmond, Virginia 23230-1143  
804/257-6685

Virgin Islands (EPA Form)  
205(J) Coordinator  
Division of Natural Resources Management  
14 F Building 111, Watertut Homes  
Christianstead, St Croix,  
Virgin Islands 00820

Washington (State Form)  
Underground Storage Tank Notification  
Solid and Hazardous Waste Program  
Department of Ecology, M/S PV-11  
Olympia, Washington 98504-8711  
206/459-6316

West Virginia (EPA Form)  
Attention: UST Notification  
Solid and Hazardous Waste  
Ground Water Branch  
West Virginia Department of Natural  
Resources  
1201 Greenbriar Street  
Charleston, West Virginia 25311

Wisconsin (State Form)  
Bureau of Petroleum Inspection  
P.O. Box 7969  
Madison, Wisconsin 53707  
608/256-7605

Wyoming (EPA Form)  
Water Quality Division  
Department of Environmental Quality  
Herschler Building, 4th Floor West  
122 West 25th Street  
Cheyenne, Wyoming 82002  
307/777-7781

### Appendix III--Statement for Shipping Tickets and Invoices

Note. A Federal law (the Resource Conservation and Recovery Act (RCRA), as amended (Pub L 98-616)) requires owners of certain underground storage tanks to notify designated State or local agencies by May 8, 1986, of the existence of their tanks. Notifications for tanks brought into use after May 8, 1986, must be made within 30 days. Consult EPA's regulations, issued on November 8, 1985 (40 CFR Part 280) to determine if you are affected by this law.