

RHODE ISLAND GOVERNMENT REGISTER
PUBLIC NOTICE OF PROPOSED RULEMAKING

AGENCY: Department of Environmental Management

DIVISION: Waste Management

RULE IDENTIFIER: 250-RICR-140-25-1; ERLID #: 6389

REGULATION TITLE: Rules and Regulations for Underground Storage Facilities Used for
Regulated Substances and Hazardous Materials

RULEMAKING ACTION: Proposed Rulemaking

TYPE OF FILING: Amendment

TIMETABLE FOR ACTION ON THE PROPOSED RULE:

Public Notice: August 3, 2018

Hearing: September 5, 2018

End of Comment Period: September 10, 2018

SUMMARY OF PROPOSED RULE: The purposes of these Rules and Regulations are to: 1. Protect the air, soil, and waters of the state, including groundwater, from pollution resulting from the underground storage of regulated substances and hazardous materials; 2. Establish procedures and requirements for the assessment and remediation of sites contaminated due to releases associated with the underground storage of regulated substances or hazardous materials; 3. Implement a system of registration of underground storage tank facilities; 4. Prevent releases from underground storage tanks of regulated substances or hazardous materials by establishing siting, design, installation and operating requirements for underground storage tank (UST) systems; 5. Establish facility leak detection and monitoring requirements, and schedules, for the early detection of releases from underground storage tanks; 6. Require facility owners/operators to guarantee the availability of sufficient resources to respond to and rectify releases from underground storage tanks systems; 7. Establish fees and a schedule of payment for such fees; and 8. Establish UST closure procedures that provide for protection of human health and the environment.

The purpose of this amendment is to amend the existing regulations for underground storage tank systems used for regulated substances and hazardous materials. These amendments are intended to incorporate changes in Federal law, as well as clarify and strengthen existing regulations intended to preserve, and in some cases restore, the physical, chemical, and biological integrity of the air, soils, and waters of the State. This amendment also reformats the regulation in accordance with the RICR, adds an Incorporated Materials section, merges the UST Review Board regulations into these regulations, and

makes additional non-technical changes. Please note that the UST Review Board regulations are being repealed simultaneously with the amendment of these regulations. Reformatting of the regulation in accordance with RICR includes, but is not limited to, renumbering, movement of text, and elimination of duplicative or non-regulatory text, among other format changes. A summary of non-technical changes between current and proposed regulation by section is as follows:

- General: All instances of “petroleum products” have been replaced with “Regulated Substances”
- Section 1.1: Modified to clarify purpose and intent of rules
- Section 1.3 has been added to list Incorporated Materials and remove superseded rules
- Section 1.4: Clarification of UST applicability; clarification of residential applicability; clarification of responsibility of owner/operator to comply with inspection and documentation requests.
- Section 1.5: Updated definitions to clarify meaning and be consistent with Federal and State definitions. Added new Federal definitions, where applicable, and added definitions from UST Reimbursement Fund Regulations.
- Section 1.7: Clarified UST Registration process, adopts new UST registration procedure and fee schedule; clarifies process for previously unregistered tanks
- Section 1.9 has been added to incorporate the formerly separate UST Fund Regulations into these rules. Clarified some responsibilities and eligibility requirements.
- Section 1.10: Adds new Federal and State mandated testing, notification, and operational requirements
- Section 1.11: Updated to reflect Federal changes in equipment requirements; clarified equipment installation requirements; updated minimum state requirements for some equipment;
- Section 1.12: Updated and clarified requirements for repair or replacement of certain components
- Section 1.13: Clarified record keeping requirements
- Section 1.14: Updated to clarify procedures and timelines for reporting and response to certain test failures and releases; clarified and updated requirements for Site Investigations; clarified and updated minimum requirements and timeline for Corrective Action Plans;
- Section 1.15: Updated and clarified permanent closure minimum requirements; changed minimum requirements, length, application process, and eligibility for temporary closures;
- Section 1.16: Updated to include interstitial space tightness testing
- Section 1.18: Clarification of timeline and responsibility for notification of changes to UST registration;

COMMENTS INVITED:

The public hearing to receive comments concerning the proposed rulemaking will commence at 10:00 AM on September 5, 2018 in Room 300 at the Department of Environmental Management Offices, 235 Promenade Street, Providence, RI 02908. The room is accessible to the disabled. Interpreter services for the hearing impaired will be provided if such services are requested at least (3) business days prior to the hearing. Requests for such services may be made in writing or by calling TTY (711) or (401) 222-5300. A

record of the hearing will be made. Written comments concerning the regulations proposed for promulgation by the DEM may be submitted either to the Office of Waste Management, 235 Promenade Street, Providence, RI 02908 or via e-mail to joseph.cunningham@dem.ri.gov, no later than 4:00 PM on September 10, 2018. It is requested that persons who wish to make oral comments during the public hearing submit a copy of their statement for the record. All oral and written comments will be considered in the same manner.

ADDRESSES FOR PUBLIC COMMENT SUBMISSIONS:

Mailing Address: Office of Waste Management, 235 Promenade Street, Providence, RI 02908

Email Address: joseph.cunningham@dem.ri.gov

WHERE COMMENTS AND PROPOSED REGULATION MAY BE INSPECTED:

A copy of the proposed regulations will be available for examination from August 3, 2018 through September 10, 2018 by mail or at the Office of Waste Management located at 235 Promenade Street, Providence, RI 02908. Electronic copies of the proposed regulations will also be available on the DEM website at the following web addresses: <http://sos.ri.gov/ProposedRules/> and <http://www.dem.ri.gov/documents/regulations/> under Proposed Regulations.

PUBLIC HEARING INFORMATION:

Hearing Location Date and Time: September 5, 2018; 10:00 AM

Hearing Location Address: Room 300; RI DEM Offices, 235 Promenade Street,
Providence, RI 02908

The place of the public hearing is accessible to individuals who are handicapped. If communication assistance (readers/interpreters/captioners) is needed, or any other accommodation to ensure equal participation, please call (401) 222-5300 or RI Relay 711 at least three (3) business days prior to the hearing so arrangements can be made to provide such assistance at no cost to the person requesting.

FOR FURTHER INFORMATION CONTACT:

Office of Waste Management, 235 Promenade Street, Providence, RI 02908 or via e-mail to kevin.gillen@dem.ri.gov

SUPPLEMENTARY INFORMATION:

Regulatory Analysis Summary and Supporting Documentation:

The Department has determined that small businesses will not be adversely impacted by the proposed regulations referenced above. However, the public hearing is being conducted to solicit comment on the

proposals and to allow public input from small businesses or any cities or towns, which may believe that that may be adversely affected. For full regulatory analysis or supporting documentation see agency contact person above.

Authority for This Rulemaking: R.I. Gen. Laws §§ 42-17.1-2(30), 42-17.1-2(31), R.I. Gen. Laws Chapter 46-12, and in accordance with Chapter 42-35.

Regulatory Findings:

In the development of the proposed amendment consideration was given to: (1) alternative approaches; (2) overlap or duplication with other statutory and regulatory provisions; and (3) significant economic impact on small business. No alternative approach, duplication, or overlap was identified based upon available information.

The Proposed Amendment:

The Department of Environmental Management proposes to amend 250-RICR-140-25-1 as follows:

250-RICR-140-25-1

TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

CHAPTER 140 – WASTE AND MATERIALS MANAGEMENT

SUBCHAPTER 25 - OIL AND UNDERGROUND TANKS

PART 1 – Rules and Regulations for Underground Storage Facilities Used for ~~Petroleum-Regulated Substances~~~~Products~~ and Hazardous Materials

1.1 Purpose

- A. The purposes of these Rules and Regulations are to:
1. Protect the air, soil, and waters of the state, including groundwater, from pollution resulting from the underground storage of regulated substances ~~petroleum products~~ and hazardous materials;
 2. Establish procedures and requirements for the assessment and remediation of sites contaminated due to releases associated with the underground storage of regulated substances ~~petroleum-products~~ or hazardous materials;
 3. Implement a system of registration of underground storage tank facilities;
 4. Prevent releases from underground storage tanks of ~~petroleum-regulated substances~~ products or hazardous materials by establishing siting, design, installation and operating requirements for underground storage tank (UST) systems;
 5. Establish facility leak detection and monitoring requirements, and schedules, for the early detection of releases from underground storage tanks;
 6. Require facility owners/operators to guarantee the availability of sufficient resources to respond to and rectify releases from underground storage tanks systems;
 7. Establish fees and a schedule of payment for such fees; and
 8. Establish UST closure procedures that provide for protection of human health and the environment.

1.2 Authority

These Rules and Regulations are promulgated pursuant to R.I. Gen. Laws §§ 42-17.1-2(30), 42-17.1-2(31), R.I. Gen. Laws Chapter 46-12, and in accordance with R.I. Gen. Laws Chapter 42-35.

1.3 Incorporated Materials

- A. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1615 "Installation of Underground Petroleum Storage Systems," 6th Edition (2011) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- B. These regulations hereby adopt and incorporate the National Fire Protection Association (NFPA) 31 "Standard for the Installation of Oil-Burning Equipment" (2016) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- C. These regulations hereby adopt and incorporate the Petroleum Equipment Institute (PEI) RP 100 "Recommended Practices for Installation of Underground Liquid Storage Systems" (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- D. These regulations hereby adopt and incorporate the Petroleum Equipment Institute (PEI) RP 1000 "Recommended Practices for the Installation of Marina Fueling Equipment" (2014) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- E. These regulations hereby adopt and incorporate the Steel Tank Institute (STI) "STI-P3 Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks" (2015) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- F. These regulations hereby adopt and incorporate the Steel Tank Institute (STI) F894 "ACT-100 Specification for External Corrosion Protection of FRP Composite Steel USTs" (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- G. These regulations hereby adopt and incorporate the Steel Tank Institute (STI) F961 "ACT-100-U: Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks" (2015) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- H. These regulations hereby adopt and incorporate the Steel Tank Institute (STI) F922 "Specification for Permatank" (2014) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- I. These regulations hereby adopt and incorporate the Underwriters Laboratories (UL) Standard 58 "Standard for Steel Underground Tanks for Flammable and Combustible

Liquids” (1996) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

- J. These regulations hereby adopt and incorporate the Underwriters Laboratories (UL) Standard 971 “Standard for Nonmetallic Underground Piping for Flammable Liquids” (2006) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- K. These regulations hereby adopt and incorporate the Underwriters Laboratories (UL) Standard 971A “Standard for Metallic Underground Fuel Pipe” (2006) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- L. These regulations hereby adopt and incorporate the Underwriters Laboratories (UL) Standard 1316 “Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures, 2nd Edition” (1994) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- M. These regulations hereby adopt and incorporate the Underwriters Laboratories (UL) Standard 1746 “Standard for Safety External Corrosion Protection Systems for Steel Underground Storage Tanks, 3rd Edition” (2014) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- N. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1632 “Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems, 3rd Edition” (1996) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- O. These regulations hereby adopt and incorporate the National Association of Corrosion Engineers (NACE) SP0169 “Control of External Corrosion on Underground or Submerged Metallic Piping Systems” (2013) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- P. These regulations hereby adopt and incorporate the National Association of Corrosion Engineers (NACE) SP0285 “External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection” (2011) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- Q. These regulations hereby adopt and incorporate the Steel Tank Institute (STI) R972 “Recommended Practice for the Addition of Supplemental Anodes to sti-P3 USTs” (2010) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

- R. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1631 "Interior Lining and Periodic Inspection of Underground Storage Tanks, 5th Edition" (2001) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- S. These regulations hereby adopt and incorporate the National Leak Prevention Association (NLPA) Standard 631 "Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks" (1994) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- T. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1621 "Bulk Liquid Stock Control at Retail Outlets, 5th Edition" (2001) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- U. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1635 "Management of Underground Petroleum Storage Systems at Marketing and Distribution Facilities, 2nd Edition" (1987) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- V. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1637 "Using the API Color- Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals, 3rd Edition" (2012) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- W. These regulations hereby adopt and incorporate the National Fire Protection Association (NFPA) 30 "Flammable and Combustible Liquids Code" (2018) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- X. These regulations hereby adopt and incorporate the National Fire Protection Association (NFPA) 30A "Code for Motor Fuel Dispensing Facilities and Repair Garages" (2018) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- Y. These regulations hereby adopt and incorporate the National Fire Protection Association (NFPA) 329 "Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases" (2015) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

- Z. These regulations hereby adopt and incorporate the Petroleum Equipment Institute (PEI) RP 500 "Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment" (2011) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- AA. These regulations hereby adopt and incorporate the Petroleum Equipment Institute (PEI) RP 900 "-Recommended Practices for the Inspection and Maintenance of UST Systems" (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- BB. These regulations hereby adopt and incorporate the Petroleum Equipment Institute (PEI) RP 1200 "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities" (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- CC. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1604 "Closure of Underground Petroleum Storage Tanks, 3rd Edition" (1996) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- DD. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 2015 "Safe Entry and Cleaning of Petroleum Storage Tanks, 7th Edition" (2014) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- EE. These regulations hereby adopt and incorporate the American Petroleum Institute (API) Recommended Practice (RP) Publication 1615 "Installation of Underground Hazardous Substances or Petroleum Storage Systems, Sixth Edition" (2011) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- FF. These regulations hereby adopt and incorporate the Underwriters Laboratories of Canada ULC-S615 "Standard for Underground Reinforced Plastic Tanks" (2014) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- GG. These regulations hereby adopt and incorporate the Underwriters Laboratories of Canada CAN/ULC-S603 "Standard for Underground Steel Tanks" (2014) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
- HH. These regulations hereby adopt and incorporate the Underwriters Laboratories of Canada CAN/ULC-S603.1 "External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids" (2017) by reference, not

including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

- II. These regulations hereby adopt and incorporate the Underwriters Laboratories of Canada ULC-S631 "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems" (2005) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

1.4 Applicability

- A. The terms and provisions of these Rules and Regulations shall be liberally construed to permit the Department to effectuate the purposes of state law, goals, and policies.
- B. General Applicability - Unless otherwise noted, these regulations apply to all proposed, new and existing underground storage tank facilities, at which a regulated substance ~~petroleum product(s)~~ and/or hazardous material(s) is currently or previously are, or have been, stored underground in a tank or tank system; whether such facilities serve institutional, industrial, commercial, educational, agricultural, governmental, residential or other purposes; and whether such facilities or USTs located there upon, have been abandoned; and to persons who owned or operated such facilities after May 1985.
- C. Leak & Spill Response - § 1.14 of this Part ~~Rule 12 Leak and Spill Response,~~ shall apply to all facilities and the owners/operators thereof, and any person having actual knowledge of a confirmed leak, spill or other release. There are no exemptions to the responsibility to report a suspected or confirmed leak or spill.
- D. Exempted Tanks
1. These regulations do not apply to:
 - a. Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
 - b. Storage tanks located entirely within structures, such as a basement or cellar provided that:
 - (1) The structure allows for physical access to the entire storage tank; and
 - ~~(2) The structure is not part of a secondary enclosure; and~~
 - (2) The tank is situated upon or above the surface of a concrete floor;
 - c. Septic tanks;

- d. Pipeline facilities regulated under Safety, 49 U.S.C. Chapter 601-(2016); the Natural Gas Pipeline Safety Act of 1968 or the Hazardous Liquid Pipeline Safety Act of 1979;
- e. Flow through process tanks;
- f. Underground storage tanks storing propane or liquefied natural gas;
- g. Underground storage tanks used for the temporary storage of raw materials or products by industry (so called "intermittent" or "fill and draw" tanks);
- h. Emergency spill protection and overflow tanks;
- ~~USTs connected to floor drains or other piping outlets which serve residential structures of a one, two or three family dwelling;~~
- i. Oil water separators with a planned discharge required to be regulated under the Clean Water Act.

E. Except as provided for in §§ 1.11(B)-of this Part, Rule 9.02(A,B,C,D), pertaining to prohibition of new installations, §-1.14 of this Part Rule 12 Leak and Spill Response, and §-1.15(B) of this Part, Rule 13.02(A), pertaining to prohibition of abandonment of any UST, these regulations do not apply to:

- 1. Residential Tank: Tanks less than or equal to 1,100 gallons in capacity used for storing heating oil of any grade and serving a one, two, or three family unit dwelling;
- 2. Farm Tank: Tanks less than or equal to 1,100 gallons in capacity and storing heating oil of any grade for non-commercial purposes.

F. Except as provided for in §1.8 of this Part, these regulations do not apply to:

- 1. Aboveground storage tanks associated with airport hydrant fuel distribution UST systems as defined in § 1.5 of this Part.
- 2. Aboveground storage tanks associated with field constructed UST systems as defined in § 1.5 of this Part.

G. Holding Tanks: UST systems used to contain discharges of non-sanitary wastewaters (holding tanks):

- 1. All existing and proposed UST systems which are used to store/contain discharges, both intermittent and continuous, of non-sanitary wastewaters or other pollutants containing regulated substances petroleum or hazardous substances materials from floor drains or other piping outlets, shall be subject to §§ 1.7, Rule 6 Facility Registration-1.10(E) and Notification, Rule 8.05 Mandatory Corrosion Protection Requirements for Tank Systems, 1.14, 1.15,

~~1.15(B)(1) Rule 13.02, pertaining to prohibition of abandonment of any UST, 1.14 Rule 12 Leak and Spill Response, 1.15 Rule 13 Closure, 1.17, 1.18 Rule 15 Signatories to Registration and Closure Applications, Rule 16 Transfer of Certificates of Registration or Closure, 1.19 Rule 17 Holding Tanks, 1.20 Rule 18 Variances, through 1.21 and 1.22 of this Part. Rule 19 Appeals, and Rule 20 Penalties.~~

~~Appendix B of these regulations adopt by reference certain national codes of practice to be applied by DEM in its administration of these regulations. As these national codes of practice are updated and amended over time, DEM may issue written policy documents adopting the updated codes for application with these regulations. Any such policy documents shall be issued in accordance with the provisions of the RI Administrative Procedures Act, including notice and hearing, and shall be filed with the RI Secretary of State's Office.~~

H. Applicability of Delivery Prohibition:

1. § 1.10(T) of this Part ~~Rule 8.21~~ shall apply to all UST systems and persons identified under § 1.4(B) of this Part ~~rule 3.04~~ and all product deliverers.

I. Owners and operators of UST systems must cooperate fully with inspections, monitoring and testing conducted by the Department, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to section 9005 of Subtitle I of the Solid Waste Disposal Act, 42 U.S.C. § 6991d.

1.5 Definitions

A. For the purposes of these regulations, the following terms shall have the following meanings:

1. "Abandonment" means the relinquishment or termination of possession, ownership or control of underground storage tanks, by vacating or by disposition, without meeting the closure requirements listed in § 1.15 of this Part ~~Rule 13 of these regulations~~; or the action of taking a UST or UST system out of operation for a period of greater than 180 consecutive days without the prior permission of the Director pursuant to § 1.15 of this Part ~~Rule 13 Closure~~.
2. "Airport hydrant fuel distribution system" means a n-UST system which fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants (fill stands). The airport hydrant system begins where fuel enters one or more tanks from an external source such as a pipeline, barge, rail car, or other motor fuel carrier.
3. "Aquifer" means a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield quantities of water to wells and springs in quantities which in the aggregate are sufficient to supply the daily requirements of one or more persons.

4. “Authorized representative” means any individual employed by any person, including all forms of private, governmental and commercial entities included thereunder, in a position to commit the resources of that person and bind that person to any responsibilities and/or liabilities set forth under these regulations.
5. “Automatic tank gauging system” means equipment used for automatic gauging that tests for the gain or loss of liquid contents of a UST. The automatic product level monitor test must be able to detect a 0.2 gallon per hour or less leak rate at 95% probability of detection from any portion of the tank that routinely contains product. It must also be capable of measuring water in the bottom of the tank to the nearest 1/8 inch. Inventory leak reporting requirements are stated in § 1.13(B) of this Part ~~44.03~~.
6. “Bodily injury” means any physical injury or impairment to the body of a natural person or any physical illness or disease or death resulting from said injury, which has been caused, directly or proximately, by a release from a UST or UST system.
7. “Cathodic protection” means a technique to prevent the corrosion of metal surfaces by making that surface the cathode of an electrochemical cell.
8. “Cathodic protection tester” means a person who has education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems who is certified by NACE International as a Cathodic Protection Technologist, Cathodic Protection Technician, Cathodic Protection Tester, Senior Corrosion Technologist, Corrosion Technologist, and Corrosion Technician. A person who is a NACE Corrosion Technician may only collect data, however, with the stipulation that the data be reviewed by a Corrosion Technologist, Senior Corrosion Technologist, or a “corrosion expert” (a NACE corrosion Specialist or Cathodic Protection Specialist). Persons certified by the STI as a Cathodic Protection Tester also may only collect data and must have two years or corrosion work experience and be re-certified every three years and in accordance with STI protocol. ~~“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. Any person who has been certified by NACE International (the National Association of Corrosion Engineers) as a Corrosion Specialist or Cathodic Protection Specialist is recognized as meeting these requirements. In addition, a person who has been NACE International certified as a Corrosion Technician can serve as a Cathodic Protection tester, with the stipulation that the technician perform system testing under the direct oversight of a Corrosion Specialist, Cathodic Protection Specialist, Senior Corrosion Technologist, or Corrosion Technologist, as required by NACE International.~~

9. "Claim" means an application submitted to the Department for reimbursement from the fund.
10. "Claimant" means a responsible party as defined in § 1.5(A)(103) of this Part submitting a claim to the Department for reimbursement from the fund.
11. "Class A operator" means the individual or individuals designated by the owner to have primary responsibility for the overall operation and maintenance of an UST system. This person must have an understanding of the statutory and regulatory requirements that relate to the permitting of the facility and must hold a valid International Code Council "Class A" or "Class A/B" UST operator certificate recognized by the State of Rhode Island.
12. "Class B operator" means the individual or individuals designated by the owner to implement applicable regulatory requirements and implement the daily aspects of the operation, maintenance, and recordkeeping of the UST system(s). This person must hold a valid International Code Council "Class B" or "Class A/B" UST operator certificate recognized by the State of Rhode Island.
13. "Class C operator" means the individual or individuals designated by the owner whose primary responsibility is to respond to alarms, or emergencies caused by spills or releases from a UST system at the facility. This person or individuals must be trained by the Class A operator and have their knowledge of emergency response tested on a routine basis.
14. "Cleanup" means those activities undertaken pursuant to regulations promulgated by the Department for the investigation and remediation of releases from UST's or UST Systems.
15. "Cleanup goals" means the extent of corrective action required by the Department to protect human safety, health, and the environment; pursuant to its regulations governing such corrective action.
16. "Closure" means the removal from service of any underground storage tank in accordance with the provisions of § 1.15 of this Part Rule 13 Closure.
17. "Commenced construction" means that the owner/operator has obtained all governmental approvals or permits required to begin physical construction and has either ~~(1)~~ begun a continuous on-site physical construction program; or ~~(2)~~ entered into contractual obligations which cannot be canceled or modified without substantial loss and are payable upon physical construction of the facility.
18. "Commercial tank" means any underground storage tank used in the furtherance of trade, traffic, business or commerce including, without limitation, tanks used to store heating oil for residential structures containing four or more or living units.
19. "Community water system" means a public water system which serves at least fifteen service connections used by year-round residents or regularly serves at

least 25 year-round residents. This includes most private homes, apartment buildings, condos, and other residences.

20. "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.
21. "Containment sump" means a liquid-tight container that protects the environment by containing leaks and spills of regulated substances from piping, dispensers, pumps, and related components in the containment area.
22. "Contaminant" means any physical, chemical, biological or radiological substance in soil, water, air or any other environmental media which renders, or is likely to render, such soil, water, air or any other environmental media unfit for its intended use or for any feasible use.
23. "Contamination" or "contaminated" means the results of a release of regulated substances ~~petroleum~~ or other substance regulated under this Part from an underground storage tank or underground storage tank system into the ground water, surface water or soil in quantities which may adversely impact human safety, health or the environment.
24. "Continuous monitoring system" means an automatic, continuous leak detection and alarm system that operates independent of human assistance and meets industry standards such as those of Underwriters Laboratories (UL), and which is approved by the Director.
25. "Corrective action" means implementation of measures to rehabilitate site ground water, surface water, soil, or air to meet cleanup goals.
26. "Corrective action plan" means a plan that addresses contaminated soils or ground water or other related environmental or public health impacts of a release pursuant to these regulations.
27. "Corrosion expert" means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by education and practical experience, is qualified and certified to engage in the practice of corrosion control on buried or submerged metal tanks. Such a person must be accredited or certified by the National Association of Corrosion Engineers as either a Corrosion Specialist or Cathodic Protection Specialist. ~~or be a registered professional engineer with certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.~~
28. "Deductible limit" means the amount to be deducted from an amount otherwise eligible for reimbursement hereunder prior to any reimbursement from the fund as such limits are established by the R.I. Gen. Laws § 46-12.9-5.

29. "Delivery prohibition" means by order of the Director, deliveries or additions of petroleum-regulated substances ~~or other materials~~ to the UST system is prohibited due to continued non-compliance with the UST regulations. DEM staff will affix a locking "red tag" to all fill points which prevents delivery of fuel. Removal, destruction, disabling, or defacing this tag is prohibited.
30. "De minimus" means any regulated liquid, semi-solids, or gels contained in a UST at concentrations below all applicable State and Federal limits, targets, guidelines or objectives. In the absence of established objectives, guidelines, limits, or targets, de minimus shall refer to any concentration below applicable analytical Method Detection Limit (MDL) for the regulated substance.
31. "DEM" or "Department of Environmental Management" or "Department" means the Rhode Island Department of Environmental Management and/or any office thereof.
32. "Diesel fuel" means any grade of distillate oil, commonly referred to as "diesel" that is manufactured and sold for use, or is used, as fuel in an internal combustion engine; including ~~petroleum-regulated substances~~ products substituted for use as a diesel fuel.
33. "Director" means the Director of the Department of Environmental Management or his/her designee. Any documents or reports required to be submitted to the Director by these regulations should be sent to: UST Management Program, RI Department of Environmental Management, 235 Promenade Street, Providence, Rhode Island 02908.
34. "Dispenser" means equipment located aboveground that dispenses regulated substances from the UST system.
35. "Dispenser system" means the dispenser and the equipment necessary to connect the dispenser to the underground storage tank system.
- "DIESEL GENERATOR" means a machine that converts mechanical energy into electrical energy and is driven by an internal combustion energy, which consumes diesel fuel or a petroleum product substituted for use as a diesel fuel.
36. "Double-walled tank" means a container with two complete shells providing both primary and secondary containment. The container shall have a continuous 360° interstitial space between the primary and secondary shell. The interstitial space shall be designed so that an approved interstitial space monitor is able to continuously monitor this space. All double-walled tanks shall be UL-listed.
37. "Dry season" means that the time period during which the groundwater tables are at their lowest elevation at which they occur, usually falling during the months of May-December. Specific dates for the dry season will be determined on a yearly basis by the Director.

38. “Dual-usage tank” means a UST whose contents serve more than one use. (For example, the contents of the UST serves both a boiler and an emergency generator). Such tanks are treated under the usage which is more stringently regulated.
39. “Eligible claimant” means a claimant served with a notice of eligibility by the Department.
40. “Eligible costs” means costs, expenses and other obligations as incurred or to be incurred by a responsible party for site investigation, site remediation or other corrective action activities or certain third party damages ordered or directed by the Department or voluntarily performed by the responsible party and not specifically identified by the Department as ineligible.
41. “Emergency and short-term response action” means any activities undertaken immediately following the discovery of a release of regulated substances ~~petroleum~~ in order to completely or partially contain, clean up or treat the released material and remove an imminent hazard if it exists.
42. “Emergency spill protection tank” means a tank used for temporary storage of substances in response to a leak, spill or other unplanned occurrence. This tank must be emptied expeditiously following use.
43. “Emergency generator” means any internal combustion engine which produces electricity and is fueled by diesel, gasoline, any grade of fuel oil, kerosene, biodiesel, or any other regulated substance.
44. “Environmental consultant” means any of the following: a geologist certified by the American Institute of Professional Geologists (certified professional geologist); ~~or a geologist registered by any state program (registered professional geologist), or a registered professional engineer, or an environmental professional working under the supervision of a registered professional engineer, or a certified professional geologist or a registered professional geologist, and who works for a firm that is independent of the owner/operator.~~
45. “Environmentally sensitive area” means any area, including but not limited to, those wherein the groundwater is classified as GA or GAA in accordance with RI DEM Groundwater Quality Rules Rule 9 Groundwater Classification of the RIDEM Rules and Regulations for Groundwater Quality and any other area which includes sensitive receptors.
46. “Excavation zone” means the underground area containing the tank system and backfill material, bounded by the ground surface, walls, and floor of the pit and trenches into or from which the UST system is installed or removed.
47. “Facility” means any parcel of real estate or contiguous parcels of real estate owned and/or operated by the same person(s), which together with all land, structures, facility components, improvements, fixtures and other appurtenances

located therein form a distinct geographic unit and at which regulated substances ~~petroleum products or~~ hazardous ~~materials~~ materials are or have been stored in underground storage tanks.

48. "Facility component" means any underground tanks, associated pipes, pumps, leak monitoring systems, cathodic protection systems, vaults, fixed containers or appurtenant structures, used or designed to be used for the storage, transmission, or dispensing of ~~petroleum~~ regulated substances ~~products~~ and hazardous materials.
49. "Farmer" means an individual, partnership or corporation who operates a farm and has filed a 1040F U.S. Internal Revenue Form with the Internal Revenue Service, has a State of Rhode Island farm tax number and has earned ten thousand dollars (\$10,000) gross income on farm products in each of the preceding four (4) years.
50. "Farm tank" means an underground storage tank located on a tract of land operated by a farmer, provided that the material stored is used on-site.
51. "Field-constructed tank" means a tank constructed at a facility location.
52. "Flow through process tank" means any tank that is 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 a production process.
53. "Free product" means any regulated substance ~~petroleum product or hazardous material~~ that is present as a non-aqueous phase liquid (e.g. liquid not dissolved in water).
54. "Fund" means the Rhode Island Underground Storage Tank Financial Responsibility Fund as established pursuant to R.I. Gen. Laws Chapter 46-12.9.
55. "Gasoline" means a petroleum distillate, or blends of petroleum distillates, having a Reid vapor pressure of 7 pounds per square inch absolute (48.3 k Pa) or greater and capable of being used as fuel for internal combustion engines.
56. "Groundwater" means water found in the saturated zone underground ~~;~~ which completely fills the open spaces between particles of sediment ~~and~~ within rock formations or within bedrock fractures.
57. "Hazardous materials" means any material defined as a "hazardous substance" by the by section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or other regulated substances. ~~of 1980 (42 U.S.C. § 96015), as amended, (see Appendix A).~~ Hazardous materials shall also include any material defined as a "hazardous waste"

pursuant to the Rhode Island Hazardous Waste Management Act, R.I. Gen. Laws Chapter 23-19.1 of 1978, as well as any of the following materials:

- a. Acetone
 - b. Ethanol
 - c. Ethylene Oxide
 - d. Methanol
 - e. Methylene Chloride
 - f. Perchloroethylene
58. "Heating oil" means No. 1, No. 2, No. 4, No. 5, or No. 6, technical grades of fuel oil, other residual fuel oil, including bunker C and/or other fuels, except motor fuels or waste oils, when used as substitutes for any of these fuel oils used for the purpose of producing heat (e.g., burned in a furnace or boiler).
59. "Holding tank" means a UST system used to collect and store contain discharges, both intermittent and continuous, of non-sanitary wastewater and other pollutants containing petroleum regulated substances or hazardous substances from floor drains or other piping outlets.
60. "Hydraulic conductivity" means a measure of the ability of an aquifer to transmit a fluid, which depends on the properties of both the fluid and the medium.
61. "Hydraulic lift tanks" means those tanks holding hydraulic fluid for a closed-loop mechanical system using compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.
62. "Hydrostatic tightness test" means a test designed to evaluate the tightness of a UST system component that uses pressure of liquid.
63. "Initial abatement action" -means an action taken pursuant to the applicable section of the Department's UST Regulations.
64. "Initial application for reimbursement" -means an application submitted by a claimant.
65. "Leak" means a loss from, or gain to, a UST system of a 0.05 gallon per hour or more of fluid as determined by a tank tightness test or a line tightness test, or a 0.2 gallon per hour as determined by automatic tank gauging, or loss or gain of fluid to a UST system as determined by visual inspection, analytical analysis, an interstitial monitoring system other continuous monitoring system, inventory control, or other appropriate means.

66. "Line leak detector" means a device installed on the discharge side of a remote pump which is capable of interrupting product flow if there is a leak greater than or equal to three (3) gallons per hour at ~~ten~~ 10 pounds per square inch of line pressure.
67. "Local Fire Chief" means the person responsible for the administration and direction of a fire department in a fire district or municipality, including a fire administrator or chief, or that person's designee.
68. "Maintenance" means the normal operational upkeep of an underground storage tank system necessary to prevent a release of product.
69. "Modification" means any ~~addition,~~ removal, replacement, restoration, refurbishment or renovation to an existing UST system or repair of any UST system component which may regularly contains product that is inconsistent with the information provided to the Director in the Registration Application. ~~Such modifications include, but are not limited to:~~
- a. Any alterations to the site plan;
 - b. Any changes in design and/or specifications to a UST system's corrosion protection equipment;
 - c. Any changes in the design and/or specifications to a UST system's leak detection or spill prevention equipment, including groundwater monitoring wells;
 - d. The replacement or repair of any product piping;
 - e. The installation, repair or replacement of any underground storage tank.
70. "Monitoring well" means a cased well with a screened interval that intercepts the water table during all seasonal variations of groundwater levels and can be used to detect the presence of groundwater contamination.
71. "Motor fuels" means a complex blend of hydrocarbons typically used in the operation of a motor engine, such as motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any blend containing one or more of these substances (for example: motor gasoline blended with alcohol). ~~any petroleum or a petroleum-based substance, typically used in the operation of combustion (motor) engines, including but not limited to, gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol.~~
72. "New UST system" means a tank system that will be used to contain an accumulation of regulated substances for which installation has not yet commenced.

~~“NFPA 30” means the National Fire Protection Association publication number 30 entitled, “Flammable and Combustible Liquids Code,” 2008 or current edition.~~

~~“NFPA 30(A)” means the National Fire Protection Association Publication Number 30A entitled “Code for Motor Fuel Dispensing Facilities and Repair Garages,” 2008 or current edition.~~

~~“NFPA 329” means the National Fire Protection Association publication number 329 entitled, “Handling Underground Releases of Flammable and Combustible Liquids,” 2005 or current edition.~~

~~“NO. 1 FUEL OIL” means a distillate oil, commonly referred to as kerosene, range oil, or jet propulsion fuel (JP-1).~~

~~“NO. 1 1-D FUEL OIL” means a distillate oil, commonly referred to as light diesel oil.~~

~~“NO. 2 FUEL OIL” means a distillate oil, commonly referred to as home heating oil.~~

~~“NO. 2 2-D FUEL OIL” means a distillate oil, commonly referred to as medium diesel oil.~~

~~“NO. 4 FUEL OIL” means a distillate oil blend of No. 2 and No. 6 fuel oil.~~

~~“NO. 5 FUEL OIL” means a distillate oil blend of No. 4 and No. 6 fuel oil.~~

~~“NO. 6 FUEL OIL” means a distillate oil, commonly referred to as Bunker C or residual fuel.~~

73. “Non-transient non-community water system” means a public water system that regularly supplies water to at least 25 of the same people at least six months per year. Examples of this type of water system include schools, factories, office buildings, and hospitals which have their own water systems. ~~“NON-COMMUNITY WATER SYSTEM” means a public water system that is not a community water system.~~

74. “Observation well” means a well other than a monitoring well that is typically located in a tank excavation or the collection sump of a secondary containment system.

75. “Oil-water separator” means a UST system used typically for storm water runoff applications and intended for the separation of oil-water mixtures containing oils and greases.

76. “On-site” means located on the same or geographically contiguous property, which may be divided by public or private right-of-way provided the entrance and exit between the properties is at a cross-roads intersection and access is by crossing as opposed to going along the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, is also considered on-site property.

77. "Operate a facility" means to maintain regulated substances ~~petroleum product(s)~~ or hazardous material(s) in underground storage tanks at a facility for purposes of storage, use or sale, and to conduct operation and maintenance for each tank as required in § 1.10 of this Part. ~~Rule 8.~~
78. "Operator" means any person in control of, or having responsibility for, the daily operation of the UST system. An Operator designation is not equivalent to designation as a "Class A Operator", "Class B Operator", or "Class C Operator", as defined in §§ 1.5(A)(11), 1.5(A)(12), 1.5(A)(13) of this Part solely by virtue of such designation. An Operator may be designated as a Class A, B, or C Operator only if that person has fulfilled the training and certification requirements of an approved training program as set forth in § 1.10(U) of this Part. The designation of a Class A, B or C operator does not relieve the Operator from the duties, responsibilities, or liabilities outlined in these regulations.
79. "Overfill ~~Protection~~prevention" means a device that will restrict or stop the flow of fuel during a delivery or otherwise alert the transfer operator, before the tank reaches full capacity.
80. "Overflow tank" means a tank used for temporary storage of substances in response to a leak, spill or other unplanned occurrence. This tank must be emptied expeditiously following use.
81. "Owner" means any person, corporation, group, or other entity who holds exclusive or joint title to, or lawful possession of, a facility or part of a facility.
82. "Owner/Operator" means any owner and/or operator
83. "Person" means an individual, trust, firm, joint stock company, corporation (including quasi-government corporation), partnership, or other unincorporated association, syndicate, governmental entity or subdivision thereof.
84. "Petroleum product" means crude oil or any fractions thereof that is liquid at standard conditions of temperature (60°F) and pressure (14.7 pounds per square inch absolute) and includes substances derived from crude oil including, but not limited to the following:
- a. Gasoline
 - b. Fuel Oils
 - c. Diesel Oils
 - d. Waste Oils
 - e. Gasohol, lubricants and solvents
85. "Pollutant" means any material or effluent which may alter the chemical, physical, biological, or radiological characteristics and/or integrity of water, soil, air or other

environmental media including, but not limited to, dredge spoils, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, cellar dirt or industrial, municipal, agricultural, or other waste, regulated substances petroleum or petroleum products, including but not limited to oil.

86. "Product deliverer" means any person who delivers or deposits product into an underground storage tank. This term may include major oil companies, jobbers, petroleum-regulated substance transportation companies, or other product delivery entities.
87. "Product pipeline" means any pipeline that currently or previously connected to a UST or UST system which carries, or carried, any regulated substance, including all regulated substances
88. "Property damage" shall means any physical injury to real or personal property, which has been caused, directly or proximately, by a release from a UST or UST System.
89. "Public water system" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least ~~15~~^{fifteen} service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.
90. "Red tag" means a tag, device, or mechanism, approved by the Director and affixed to a UST system's fill pipe that clearly identifies a UST system as ineligible for product delivery. The tag or device must clearly state "It is unlawful to deliver to, deposit into, or accept product into this UST system".- The tag or device must be of tamper resistant material in order that it cannot be removed and reattached without obvious visual evidence. Also see "Delivery Prohibition" §1.5(A)(29) of this Part.
91. "Regulated substance" and "Regulated Substances" means any substance defined in 1.5(A)(29) of this part, as well as 42 USC 9601 § 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, 42 U.S.C. § 9601 (but not including any substance regulated as a hazardous waste under subtitle C). -The term regulated substances also includes 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, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.
92. "Reimbursement" means an assignment of money made by the Department from the fund in payment of eligible costs, subject to deductible limits and such other provisions of R.I. Gen. Laws Chapter 46-12.9.

93. "Reimbursement fee schedule" means the schedule of fees deemed reasonable and customary by the Department for clean-up and related activities.
94. "Release" means any spilling, leaking, pumping, pouring, injecting, emitting, escaping, leaching, discharging, or disposing of any material stored in an underground storage tank system subject to these regulations into groundwater, surface water, soil, air or any other environmental media.
95. "Remediation" means the act of implementing, operating and maintaining a remedy or remedial action.
96. "Remediation regulations" means the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases.
97. "Remedy" or "remedial action" means those actions taken to rectify the effects of a release of regulated substances ~~petroleum or petroleum product~~, so that it does not cause a significant risk to present or future public health or welfare, or the environment.
98. "Remote pumping system" or "~~(also known as a~~ submerged pumping system") means a system in which one or more pumping units push a regulated substance ~~petroleum product~~, via a pressurized piping system, to one or more points away from the tank or tanks.
99. "Remove from service" means to cease to operate a facility component.
100. "Repair" means to restore to proper operating condition a tank, pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, release detection equipment or other UST system component that has caused a release of product from the UST system or has failed to function properly.
101. "Replaced" means to remove a tank and install another tank. For piping, it means to remove 50 percent or more of piping and install other piping, excluding connectors, connected to a single tank. For tanks with multiple piping runs, this definition applies independently to each piping run.
102. "Residential tank" means a tank containing ~~No. 2~~-heating oil of any grade serving a one, two or ~~three~~-three residential unit.
103. "Responsible party"- means any and all combinations of ~~the aforementioned parties~~: owner of the property, UST, or UST components, including, but not limited to, all individuals or organizations identified by the City tax assessor or named on the deed or title for the property; any individual, group, corporation, LLC, or other entity named on a UST registration form; any person who otherwise caused or is legally responsible for a release of regulated substances ~~materials~~ from a UST system; the Operator responsible for day to day operations and oversight of the UST system, the Class A, Class B, or Class A/B operator,

~~and other managers responsible for UST system may also be considered a responsible party.~~

104. "Saturated thickness" means the thickness of an aquifer below the water table.
105. "Secondary Containment" or "secondarily contained" -means a release prevention and release detection system for a tank or piping. This system has an inner and outer barrier with an interstitial space that is monitored for leaks. This term includes containment sumps when used for interstitial monitoring of piping.
106. "Septic tank" means a watertight receptacle which receives ~~the discharge of~~ sewage, graywater, or other domestic waste from a building sewer, and is designed and constructed to permit the deposition of settled solids, the digestion of the matter deposited, and the discharge of the liquid portion into a leaching system.
107. "Single-walled tank" means any container that has a single shell enclosing the contained material. Any tank which does not provide a continuous 360° interstitial space between a primary and secondary shell that can be continuously monitored shall be regulated as single-walled.
108. "Site" means any location within Rhode Island at which or from which there has been a release of ~~petroleum a regulated substance~~ associated with an Underground Storage Tank or Underground Storage Tank System or any location to which ~~such petroleum a regulated substance~~ has migrated.
109. "Site investigation" means any action taken to determine the character, nature and extent of a ~~petroleum regulated substance~~ release from a UST or UST System, pursuant to these regulations.
110. "Spill" means a loss of ~~petroleum a regulated substance product~~ or hazardous material in a manner other than a leak, occurring on the property where a facility is in operation, and such that the product or material is likely to enter groundwater, surface water, soil, air or any other environmental media and shall be considered a release from a facility.
111. "Spill containment basin" means a device installed in fill pipe manholes that prevents ~~petroleum-regulated substance product or regulated material~~ spills from leaching into the soil and groundwater.
- ~~"STRATIFIED DRIFT" means the predominantly sorted sediments deposited in layers by meltwater from a glacier.~~
112. "Submerged fill tube" or "drop tube" means any fill pipe or tube which fits directly into the underground tank riser pipe and allows submerged filling. This pipe or tube should be located six (6) inches above the bottom of the tank and cut at a 45° angle.
113. "Substantial construction" means that a continuous on-site physical construction program has progressed to a point where 25% or more of the total project is

completed or where 25% or more of the total cost of the project has been expended for materials which are at the site.

114. "Suction pumping system" means a system in which a pump at a dispensing island reduces pressure in the product line to the underground storage tank to less than atmospheric pressure, causing product from the tank to be pulled to the island via the product suction line.
115. "Surface water" means a body of water whose top surface is exposed to the atmosphere and includes all waters of the territorial sea, tidewaters, all inland waters of any river, stream, brook, pond, lake or wetlands.
116. "Tank" means a stationary device designed to contain ~~petroleum-a regulated substance products or other regulated substances and~~ which is constructed of non-earthen materials that provide structural support and which is an underground storage tank.
117. "Tank pad monitoring well" or "tank field monitoring well" means a subsurface monitoring well that is located within the tank pad or immediate vicinity of the tank field and reaches a depth of at least one⁴ foot below the lowest point of the UST system.
118. "Temporary closure" means to temporarily halt use of an underground storage tank or tank system due to change in owner or operator, facility or tank system repair, modification, upgrade, or seasonal closure. Temporary closures must be approved by DEM 30 days in advance of closure, is limited to 12 months, and is not intended to be used as an alternative to removing the tanks.
119. "Third-party claim" means any claim for monetary damages for bodily injury or damage to property brought against a responsible party in a court of competent jurisdiction, which claim has resulted in a final judgment, order or court-approved settlement that explicitly establishes that: the third-party claimant sustained bodily injury, damage to property, or damage to natural resources; the bodily injury, damage to property, or damage to natural resources sustained by the third-party claimant was the direct or proximate result of a release; and that the responsible party is liable for the release.
120. "Tightness test" means a test able to determine whether or not an underground storage tank, line or system is ~~liquid-tightleaking~~ as defined ~~in~~by NFPA 329, "Recommended Practice for Handling Underground Releases of Flammable and Combustible Liquids and Gases", incorporated above at ~~in~~ § 1.3(Y) of this Part. The test shall be capable of accurately detecting a tank or a tank and line leak of 0.1 gallons per hour, adjusted for all variables, with a probability of detection of no less than 95 percent and a probability of false detection of no more than ~~five~~⁵ percent. Measurements recorded for each test shall be in accordance with manufacturer's protocol. The test method must be approved by the Director prior to use, and must be conducted by persons licensed by DEM to perform the tests in accordance with ~~who have demonstrated the capability to properly conduct the~~

~~test in accordance with~~ § 1.16 of this Part. ~~h Rule 14, Approval of Tank and/or Line Tightness Tests.~~

121. "Till" means the predominantly unsorted, unstratified sediments deposited directly by a glacier.
122. "Transient non-community water system" means a public water system that provides water at locations where people do not remain for long periods of time such as a gas station, campground, movie theatre, or similar establishments.
123. "Transmissivity" means a measure of the ability of an aquifer to transmit a fluid. It is equal to the average hydraulic conductivity multiplied by the saturated thickness.
124. "Under-dispenser containment" -or- "UDC" -means containment underneath a dispenser system designed to prevent leaks from the dispenser and piping within or above the UDC from reaching soil or groundwater.
125. "Underground" means 10 percent or more of the volume of the facility components (storage tanks and piping) is buried in the ground.
126. "UST" or "Underground Storage Tank (UST) System" means any one or more underground tanks, and their associated components, including piping, used to contain, transport, or store regulated substances whose volume is 10 percent or more beneath the surface of the ground.
- ~~"UST" or "UNDERGROUND STORAGE TANK (UST) SYSTEM" means any one or more underground tanks, whose volume is 10 percent or more beneath the surface of the ground, and their associated components, including piping, used to contain, transport, or store an accumulation of petroleum product or hazardous material whose volume is 10 percent or more beneath the surface of the ground. The system shall include piping whose volume is 10 percent or more beneath the surface of the ground.~~
127. "Vault" means a structure such as a basement or cellar which: houses an underground storage tank; is designed to contain any leaks from the tank and provide protection from corrosive soils; is not part of a secondary enclosure; and is designed such that the tank is situated upon or above the surface of a concrete floor and allows for physical access to an inspection of the storage tank and inside the vault.
128. "Vent whistle" means a device installed in the vent pipe of a UST designed to whistle when the tank is being filled but goes silent when the tank is full.
129. "Waste oil" means used or spent oil of any kind, including but not limited to those oils from automotive, industrial, aviation and other sources.

130. "Wear plate" means a thick deflection plate or striker plate measuring at least nine 9 inches wide and an area of at least one foot square ~~in an area~~ which is located on the bottom of the UST, under each tank opening.
131. "Wellhead protection area" means the three-dimensional zone, surrounding a public well or wellfield through which water will move toward and reach such well or wellfield, as designated by the Director pursuant to R.I. Gen. Laws Chapter 46-13.1.

1.6 Administrative Findings

- A. Approximately 25% of the population of Rhode Island depend upon groundwater as a sole or principal source of water supply.
- B. The principal groundwater resources of the State are located in relatively thin, glacial deposits of stratified sand and gravel that underlie about 1/3 ~~one-third~~ of the State. These aquifers lie close to the surface and are extremely vulnerable to contamination.
- C. A number of small public and private water users obtain water from till-covered, fractured bedrock aquifers throughout the state. These aquifers are especially difficult to monitor and to reclaim once contaminated.
- D. A large portion of the State's future water supplies will likely be developed from groundwater sources due to the limited number of suitable sites for the construction of surface water reservoirs.
- E. The effective protection of drinking water supplies requires a recognition that groundwater and surface water systems are hydrogeologically interconnected and contaminants may be transferred between such systems.
- F. The growing number of groundwater contamination incidents resulting from releases of ~~petroleum-regulated substances products and materials~~ from UST systems poses a serious threat to the environment and public health.
- G. As a release from a n-UST poses a high risk to groundwater quality, the establishment of new tank facilities in the state's most valuable aquifer areas, those being designated wellhead protection areas pursuant to R.I. Gen Laws Chapter 46-13.1 ~~R.I.G.L. 46-13.1~~, should be restricted.

1.7 Facility Registration

- A. Applicability
1. All owners/operators of USTs shall comply with the registration requirements of this rule unless otherwise exempted in § 1.4(D) of this Part. ~~Rule 3-03.~~
- B. Prohibition of Use of Unregistered USTs

1. No person subject to this rule shall operate an underground storage tank facility unless the tank(s) is/are registered with the Department.

C. Registration Deadlines

1. ~~All USTs which fall under the registration requirements of this rule unless otherwise exempted by § 1.4(D) of this Part shall be registered within 30 days of discovery or installation. The owner/operator of an UST facility shall apply for and obtain a certificate of registration from the Director in accordance with the following schedule~~

~~New and Replacement Facilities: The owner/operator shall apply for a certificate of registration before commencing construction.~~

~~Existing facilities: The owner/operator shall have applied for and obtained a certificate of registration in accordance with the following deadlines:~~

Type of Tank	Registration Deadline
Tanks of any size storing No. 4, No. 5 or No. 6 fuel oils	January 31, 1993
Tanks with less than or equal to a capacity of 1,100 gallons storing motor fuels at residential properties	January 31, 1993
Farm tanks with less than or equal to a capacity of 1,100 gallons storing motors fuels	January 31, 1993
Tanks serving floor drains	July 1, 1994
All other tanks subject to these regulations of any size storing petroleum products or hazardous materials	April 9, 1985

2. USTs No Longer in Service

- a. Any UST that has been removed from service for more than 180 days without the permission of the Director is considered abandoned and shall be subject to the closure requirements contained in § 1.15 of this Part.
~~Rule 13 Closure.~~

D. Application for Registration

1. To apply for a certificate of registration, the facility owner/~~operator~~ shall complete, certify and submit to DEM the application forms available from the Department, along with the applicable registration fees. Information to be included on the form shall include, but not be limited to, the following:

- a. For New UST Systems and Proposed Replacement Tank Systems:

- (1) A set of detailed installation plans and specifications for the tank system. ~~All plans for new~~ all new and replacement UST systems shall be reviewed and stamped by a registered professional engineer.

~~The Director reserves the authority to require that plans for replacement UST installations be stamped by a registered professional engineer at locations where the site conditions and/or installation are determined to be complex or pose engineering difficulties.~~

- (2) A written description, including technical specifications, of the following:

~~(AA)~~ Proposed tank size, construction material, construction type and material to be stored;

~~(BB)~~ All proposed leak monitoring systems;

~~(CC)~~ Proposed spill/overfill protection methods;

~~(DD)~~ Proposed corrosion protection methods; and

~~(EE)~~ Operation and maintenance requirements for any of the above.

- (3) A site plan including all of the information listed below:

~~(AA)~~ Proposed locations of all tanks, piping, and dispensing pumps;

~~(BB)~~ Proposed locations of on-site monitoring or observation wells; where applicable.

~~(CC)~~ Water table elevation, where available;

~~(DD)~~ Location of all public water supply wells or reservoirs within 400 feet of the facility site;

~~(EE)~~ Location of all facilities served by private wells within 200 feet of the facility site;

(FF)- Location of all proposed and existing building and associated structures;

(GG)- Boundaries of the facility site; and

(HH)- North Arrow.

b. For Existing UST Systems:

(1) The results of all tightness tests and leak detection tests pertaining to all tanks and associated piping.

(2) Written description of the following:

(AA)- Installation date;

(BB)- Tank size, construction material, construction type and material stored;

(CC)- All existing or proposed leak monitoring systems;

(DD)- Spill/overfill protection methods;

(EE)- Corrosion protection methods; and

(FF)- Operation and maintenance requirements for any of the above.

(3) A site plan including all of the information listed below:

(AA)- Location of all tanks, piping, and dispensing pumps;

(BB)- Location of existing or proposed on-site monitoring or observation wells; where applicable.

(CC)- Description of water service to the facility and properties within 200 feet of the facility site;

(DD)- Location of buildings and associated structures on-site;

(EE)- Boundaries of the facility site; and

(FF)- North Arrow.

(4) Description of all repairs performed on the tank system.

(5) A description of all past spills and leaks associated with the tank system known to have occurred at the site in or after October, October, 1984.

E. Unknown Tank Size

1. Any tank of unknown size shall be assumed to be of regulated capacity unless it is determined to the satisfaction of the Director by records or measurements that the tank is not of regulated capacity.

F. Unknown Tank Age

1. Any double-walled tank of unknown age shall be assumed to be greater than twenty years of age for the purpose of these rules. Any single-walled tank of unknown age shall be assumed to be over 32 years of age and is required to be taken out of service and permanently closed immediately. installed prior to 1985 and is required to be permanently closed prior to December 22, 2017. =

G. Issuance of Registration Certificates:

1. For Existing UST Systems: The Director shall issue a certificate of registration to the owner/~~operator~~ of an existing tank or existing tank facility upon review and approval of an application and receipt of fees pursuant to this rule.
2. For New and Replacement UST Systems: The Director shall issue a certificate of registration to the owner/~~operator~~ of a tank facility at which new or replacement tanks have been installed in accordance with an approved application, and upon receipt and approval of the following:
 - a. Complete registration application form;
 - b. Applicable fee payment;
 - c. Installation plans; stamped by a professional engineer for new facilities;
 - d. A completed installation certification form, as specified in the Department's Installation Checklist and Certification Form Appendix D, signed by the installer and owner;
 - e. A completed manufacturer's installation checklist, signed by the contractor; and
 - f. Tightness test results for the tank(s) and piping, which indicates that the tank system, as installed, is not leaking.
3. Receipt of a registration certificate does not necessarily indicate compliance with all applicable rules of these regulations.

H. Renewal of Registration Certificates

1. All facility owners/operators, except those listed as exempt in § 1.7(l) Rule 6.09 of this Part ~~below~~, shall renew their certificate(s) of registration annually as follows:

- a. During the first quarter of each fiscal year (July 1 to September 30), the Department shall send renewal notices and invoices to the owner of record. the payment of registration fees to each owner/operator of registered underground storage tanks. Each owner/operator shall submit payment~~return the invoice with payment of fees set forth in this section~~ no later than ~~forty-five (45)~~ days from the date of said notices and invoices.
 - b. All registration and late fees may be paid via the State of Rhode Island online payment portal. Other forms of payment, including checks, money orders, or cash will be accepted with an additional \$5-per-UST fee for processing.
 - c. Upon successful completion of the online payment process on the State of Rhode Island online payment portal, an electronic copy of the registration certificate will be available to download or print.
 - d. DEM will no longer mail owners or operators hard copies of registration certificates. If an owner or operator wishes to receive a copy of their certificate, they may do so via the following methods:
 - (1) Print a copy of the registration certificate when paying via the online payment portal;
 - (2) Performing an in-person file review of the UST file;
 - (3) Accessing the public web portal;
 - (4) Requesting an electronic copy from DEM staff.
2. Certificates of registration shall be valid for one year expiring on September 30th annually, ~~or through 45 days after the date of invoice for the subsequent fiscal year.~~

I. Exempted Tanks

1. The following owners/operators of underground storage tank facilities, while required to meet the obligations of these regulations, are exempt from annual registration fees:
 - a. Federal, state and local governments and any agency or department of those governments;
 - b. Nonprofit fire districts;
 - c. Owners/occupiers of one, two, or three unit family~~dwelling~~s that utilize tanks, of a capacity of greater than 1,100 gallons storing heating oil that is consumed solely onsite for heating purposes;

- d. Owners/operators of farm tanks of greater than a capacity of 1,100 gallons storing fuel for heating purposes;
- e. Owners/operators of underground storage tanks that have been closed in accordance with these regulations.
- f. Receipt of a registration certificate does not necessarily indicate compliance with all applicable sections of these regulations.

J. Registration Fees

- 1. All facility owners/operators shall pay to the Department an annual registration fee of ~~seventy five dollars (\$75.00)~~ one hundred dollars (\$100) -for each underground storage tank required to be registered at the facility.

K. Multi-Compartment Tanks

- 1. The registration fee for USTs with multi-compartments will be based upon the number of compartments. (If a tank has two compartments it is considered two tanks for registration and fee purposes.)

L. Payment of Fees

- 1. All persons who register or renew registration of underground storage tank facilities shall submit registration fees via the State of Rhode Island online payment portal. Other forms of payment, including checks, money orders, or cash will be accepted with an additional \$5-per-UST fee for processing. ~~in the form of a check made payable to: "Treasurer, State of Rhode Island," which will be placed in a restricted receipt account to be used for the UST Program.~~
- 2. All payments must be for the full amount of the registration fee, including late fees where applicable.
- 3. The Director shall deposit all monies collected pursuant to this rule into the Water and Air Protection Program as established in R.I. Gen. Laws §Chapter General Laws section 42-17.1-26.z).

M. Late Fees

- 1. Owners/operators who fail to pay a registration fee within the specified time frame shall be subject to a late fee charge of \$35.00 per tank per year.

N. Acceptance of Fees

- 1. The Director's acceptance of registration fees does not indicate that the tanks are in compliance with all UST regulations.

O. Penalties

1. Failure to obtain a certificate of registration in accordance with these regulations shall constitute a violation of these regulations and may subject the owner/~~operator~~ to penalties.
2. Where an owner/~~operator~~ of a facility who fails to obtain a certificate of registration from the Department, the Director may order a delivery prohibition for the UST system or that the owner/operator to immediately implement temporary or permanent closure procedures in accordance with ~~§ 1.15 of this Part.~~~~Rule 13 Closure, of these regulations.~~

P. ~~Modifications of Certificates of Registration~~Change of Registration Information or Transfer of Ownership:

1. Changes in Ownership: Changes in ownership of a tank or tank facility are subject to § 1.18 of this Part~~Rule 16, Transfer of Certificates of Registration or Closure.~~
2. Change in Registration Information: Excepting a change in ownership, which is subject to § 1.18 of this Part~~Rule 16 Transfer of Certificates of Registration or Closure.~~ owners/operators of a UST facility shall:
 - a. Report any change in information contained on the original registration form (including a change in the product stored) to the DEM in writing within ~~(10) ten~~ fifteen (15) days of that change.
 - b. All changes to registration information must be submitted using the DEM-supplied form. Verbal and other forms of written communication are not accepted.
 - c. Maintain a continuous and accurate record of the name, address and length of time during which particular persons operated a facility. The record shall be maintained by the owner/operator until such time as the facility is closed in accordance with § 1.15 of this Part~~Rule 13 Closure, of these regulations.~~ Upon request, the written record of operators shall be made available by the owner to the Department.

Q. Revocation of Registration

1. The Director may, after ~~ten (10)~~ days written notice to the person or persons affected, and after a hearing, if requested by the affected person or persons, suspend, modify or revoke a certificate of registration for cause including, but not limited to:
 - a. The information submitted by the application was incomplete, false or misleading;
 - b. Circumstances on which the certificate was based have materially and substantially changed since the certificate was issued;

- c. Failure to pay registration fees;
- d. Noncompliance with these regulations;
- e. Failure to comply with an order of the Director; or
- f. Failure to provide information to the Director that is required to be maintained under these regulations after receipt of written request from the Director.

R. Closure of Facilities with Revoked Registrations

- 1. Upon the denial or revocation of the certificate of registration by the Director, the owner/operator shall immediately implement facility closure procedures in accordance with § 1.15 of this Part. ~~Rule 13 of these regulations.~~

1.8 Financial Responsibility

A. Applicability

- 1. This rule shall apply to all owners/operators of ~~petroleum-regulated substance~~ underground storage tank systems required to register under this Part ~~these regulations~~ with the following exceptions:
 - a. USTs used solely for the storage of heating or fuel oils consumed on the facility premises;
 - b. Farm or residential USTs with capacity of 1,100 gallons or less and used solely for the storage of motor fuel which is not for resale; and
 - ~~(C) — Airport hydrant fueling systems; and~~
 - c. UST facilities owned by the state, federal or municipal government which, consistent with EPA requirements, have been deemed to be inherently capable of meeting financial responsibility requirements.

B. Compliance ~~Dates~~

- 1. Owners of ~~petroleum-regulated substance~~ underground storage tanks are required to comply with the requirements of this Part ~~Rule~~ in accordance a manner consistent with 40 C.F.R. § 280. ~~40 CFR 280, as amended, by the following dates:~~
 - ~~a. — By January 24, 1989: All petroleum marketing firms owning 1,000 or more USTs and all other UST owners that report a tangible net worth of \$20 million or more to the U.S. Securities and Exchange Commission (SEC), Dun and Bradstreet, the Energy Information Administration, or the Rural Electrification Administration;~~

- b. ~~By October 26, 1989: All petroleum marketing firms owning 100-999 USTs;~~
- c. ~~By April 26, 1991: All petroleum marketing firms owning 13-99 USTs at more than one facility;~~
- d. ~~By December 31, 1993: All other petroleum UST owners, including municipal governments, not described in paragraphs (A), (B), or (C) of this section §§ 1.8(B)(1)(a) through 1.8(B)(1)(c) of this Part.~~

C. Demonstration of Financial Responsibility~~;~~

1. Unless otherwise exempted from these rules, the owner of any UST system shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases from an underground storage tank system in accordance a manner and in amounts consistent with 40 C.F.R. § 280 40 CFR part 280, as amended.
2. The amount of financial assurance required in ~~part 7.03 (A)~~ § 1.8(C)(1) of this Part shall exclude legal defense costs.
3. The amount of financial responsibility required shall not limit liability of the owner/operator for damages caused by a release.

D. Rhode Island UST Financial Responsibility Fund

1. An owner/operator may satisfy the Financial Responsibility requirement by being eligible for the Rhode Island UST Financial Responsibility Fund, established by the R.I. Gen. Laws Chapter 46-12.9, "Rhode Island Underground Storage Tank Financial Responsibility Act", RIGL Chapter 46-12.9.

1.9 The Rhode Island UST Financial Responsibility Fund

A. Purpose and Scope

1. The purpose of the fund, established in R.I. Gen. Laws Chapter 46-12.9, is to provide a mechanism to comply with financial responsibility requirements listed in § 1.8 of this Part and to ensure that the environmental and public health impacts of leaks from USTs are addressed in an effective and timely manner. The fund shall provide reimbursement for the eligible costs incurred as a result of the release of petroleum specific regulated substances from certain USTs or UST systems and for eligible third-party claims. The fund will provide reimbursement of not more than \$1,000,000 per incident and up to \$2,000,000 in the aggregate for eligible costs.
2. This Section shall be construed to be consistent with R.I. Gen. Laws Chapter 46-12.9 wherein said chapter has established guidelines for reimbursement from the

fund. Any variance between these regulations and said chapter shall be controlled by said chapter.

B. Eligibility Requirements

1. A claimant must be subject to financial responsibility as required by 40 C.F.R. § 280 and § 1.8 of this Part.
 - a. ———To be eligible for reimbursement, a claimant must be a person who has incurred or will incur eligible costs as a result of taking corrective actions, paying third party claims, or otherwise incurring eligible costs as a result of a release of petroleum subject to the motor and special fuels tax.
2. Claimants may be eligible for reimbursement of eligible costs incurred for city, town, state or state agency sites provided that:
 - a. A city, town, the state or a state agency is the responsible party for a release at the site and was the owner of said site at the time of the release.
 - b. A city, town, the state or a state agency is the responsible party and owner of the site at the time of application on which a release occurred prior to the city, town or state agency's ownership, provided that the government entity purchased the property prior to March 1, 1998; or
 - c. A city, town, the state or a state agency was the responsible party at the time of the release and the site is owned by a successor in interest at the time of application.
3. Costs incurred must be related to the cleanup of, or third party claims from, the release of petroleum subject to the motor and special fuels tax from an underground storage tank or underground storage tank system.
4. Costs incurred prior to January 1, 1994 by responsible parties who are owners/operators of no more than one location containing USTs are not eligible for reimbursement. Costs incurred by all other responsible parties prior to July 8, 1994 are not eligible for reimbursement.
5. Underground storage tanks containing petroleum products for which the motor and special fuels tax is inapplicable, including underground storage tanks used for the distribution of No. 2 heating oil, used/waste oil, kerosene or other regulated substances materials as deemed appropriate by the Department, may be eligible for reimbursement with the following exceptions:
 - a. Underground storage tanks containing heating or fuel oils used solely for onsite consumption shall not be eligible.

b. Underground storage tanks exempted from these regulations under §§ 1.4(D), ~~and~~ 1.11(B)(1) through (B)(4) of this Part shall not be eligible.

6. Any costs incurred as a result of a release from a UST or UST system that is not registered pursuant to this Part, or determined not to be in compliance with this Part as of the date the release was discovered, shall not be eligible for reimbursement from the fund. Should the UST or UST system come into compliance, however, said costs may become eligible for reimbursement. The claimant must be in compliance with all requirements of this Part, including but not limited to: requirements for registration, proper installation, spill containment, line leak detection, corrosion protection, leak detection, tank tightness testing, inventory control, closure and leak or spill reporting.

C. Owner/Operator Notification

1.- The Department will inform owners/operators of USTs or UST systems subject to financial responsibility requirements about the existence and functioning of the fund when a release from their UST or UST system is reported to the Department pursuant to this Part.

D. Fund Procedures

1. Initial Application

a. Upon discovery of a release, notification to the Department, and expenditure or anticipated expenditure by the claimant of more than the deductible amount defined in § 1.9(D)(2) of this Part, or upon entry of a final judgment for bodily injury or property damage resulting from a third party claim, or in furtherance of an approved settlement of a third-party claim for bodily injury or property damage resulting from a release, a claimant may file an initial application with the Department.

b. Initial and subsequent applications for reimbursement from the fund shall be made to the Department on forms developed by or on behalf of the Department.

2. Deductible

a1.- Effective with the promulgation of this Part, claimants shall pay a deductible of \$20,000 in eligible expenses unless the Department compliance determination indicates a lesser amount is owed.

3. Compliance Determination

a. Upon receipt of an initial fund application, the Department shall review its records to determine whether the UST or UST system responsible for the release ~~was registered~~ had a valid registration certificate- and was in compliance with this Part as of the date that the release was discovered.

UST systems that are not in substantial compliance or have an unresolved Letter of Responsibility, Letter of Non-Compliance, Notice of Intent to Enforce, Notice of Violation, Notice of Intent to Prohibit Delivery, or Delivery Prohibition at the time of the release or discovery of release are not eligible for reimbursement from the UST Financial Responsibility Fund. -USTs or UST systems with a history of non-compliance with this Part may not be considered for lower deductible amounts regardless of any settlements or contracts negotiated with the Department or any payments of administrative penalties to the Department. Registration fees must have been paid on time and in full to be considered for lower deductible amounts.

- b. The Department shall notify the claimant of its status of determination within ~~thirty (30)~~ days of receipt of the initial application. The Department may place restrictions on eligibility as pursuant to its compliance determination.

4. Reimbursement

a. Supplemental Claim Submittals

- (1) All supplemental claims, or requests for reimbursement submitted after the initial application, shall be subject to the quarterly reimbursement deadlines as set forth by the Department. These deadlines will be scheduled annually and be made available to claimants on the Department's website.
- (2) All costs associated with a request for reimbursement must be submitted within 24 months after having been incurred, provided however, that the cost is not the subject of a legal dispute. For purposes of this Section, the date on which costs were incurred shall be the original invoice date. In the event the cost is a subject of a legal dispute, the claimant shall notify the fund of said dispute by filing a signed affidavit within 24 months of the onset of the dispute. -The affidavit shall include the nature of the dispute, and shall name any counsel representing the parties to the dispute. No action shall be taken by the fund, concerning the specific claim, until such time as the dispute is resolved and the fund receives a copy of any decision rendered by a court or arbitrator or settlement agreement.
- (3) A claimant may not submit a supplemental claim for any individual site with a total less than \$5,000.00 of costs related to eligible cleanup activities. However, if a site incurs less than \$5,000.00 in related costs in one calendar year, the claimant may submit a single supplemental claim with no established minimum amount at the next quarterly deadline.

- (4) The final claim submitted for reimbursement may be of any total amount. The submission must clearly be marked as the Final Request for Reimbursement. No additional claims for the specific release will be accepted. Future claims for the site shall be considered a new release and will be subject to all aspects of establishing compliance and demonstrating the deductible.

b. Claim Approvals, Modifications, or Denials

- (1) Within 90 days following the scheduled quarterly deadline dates, the Department shall approve, modify or deny the requests for reimbursement. The Department may order technical and/or financial audits as deemed necessary.
- (2) Claimants shall be notified via documentation that shall separately list the eligible costs to be reimbursed from the fund and/or those costs, expenses and other obligations denied reimbursement.
- (3) If the Department review of a claim determines that additional information or backup documentation is needed to approve eligible costs, the claimant shall be notified and will not receive reimbursement for that quarterly submittal. The claimant must submit this additional information or documentation by the next quarterly deadline and may only resubmit the claim with backup documentation once.

c. Fund Disbursements

- (1) The Department shall consider requests for reimbursement from the fund in the order received and shall authorize disbursements accordingly, except in cases where the Director, in their discretion, determines that a particular situation warrants priority.
- (2) The Department reserves the right to determine allowable reimbursements for reasonable and appropriate eligible costs, and such allowable claims shall be reimbursed at a rate of 100% over a time period(s) determined by the Department subject to deductible limits and the provisions of R.I. Gen. Laws Chapter 46-12.9 and further subject to the availability of funds.

5. Cost Recovery

- a.- The Department may access the fund at its discretion to carry out investigative or corrective action activities at sites contaminated by petroleum releases from USTs. The Department may proceed to recover the costs incurred in carrying out these investigative and corrective action activities from the responsible party under the authority of R.I. Gen. Laws §§ 23-19.14-6 and 23-19.14-13, and in accordance with the Rules and

E. Third Party Claims

1. A third-party claim may be submitted to the Department either in the form of a final judgment or a settlement, or request for settlement.
 - a. Within ~~one hundred twenty (120)~~ days from the entry of final judgment, a claimant shall submit an initial application for reimbursement to the Department. The initial application for reimbursement shall be reviewed for a finding of eligibility pursuant to § 1.9(B) of this Part.
 - b. When a claim is submitted to the Department in the form a final judgment, the Department shall determine what costs of said judgment are relative to bodily injury and property damage upon recommendation of the staff.
 - c. When a claim is submitted to the Department with a settlement or request for settlement, said request shall be reviewed under a policy and procedure adopted by the Department, placed on file at the Department. Final approval of claims shall be by the Department.

F. Private Insurance Coverage

1. There shall be no right of recovery against the fund for payments made under other insurance.
2. Costs must be submitted to the private insurer until the limits of coverage are met.
 - a. If a private insurer denies payment of cleanup costs as not payable within the limits of coverage, a claimant may submit these denied costs to the fund for Department review.
 - b. When the limits of coverage are met, the claimant may submit reimbursement requests for any additional or ongoing cleanup costs.

G. Recordkeeping

- 1.- ———A claimant shall keep all records relating to requests for reimbursement for at least three ~~(3)~~ years from the date of final reimbursement or otherwise disposed of by the Department.

H. False Statements

1. Any person making false or misleading statements on any such application or other form to be submitted to the Department may be denied reimbursement from the fund.

I. Right to Financial Audits

1. To be eligible for reimbursement from the fund, a claimant shall allow the Department or its designee, in its sole discretion, to perform financial audits of all records pertinent to site clean-up to ensure compliance with this rule and to certify eligible remedial costs.
2. The Department reserves the right to pursue cost recovery if financial audits reveal discrepancies that resulted in overpayment of eligible remedial costs to the claimant.

J. Severability

1. _____ If any of the provisions of these regulations of the applicability thereof is held invalid by any court or competent jurisdiction, the remainder of these provisions of these regulations shall not be affected hereby.

1.10 Minimum UST Operation and Maintenance Requirements

A. Applicability

1. _____ This Section shall apply to all existing UST systems, with the exception of ~~that~~ those systems storing heating oil of any grade for on-site consumption that is consumed on-site solely for heating purposes which are exempt from §§ 1.10(C) through, (D), (E), (F)(1, 2, 3, 5, 6, and 7), (G), (I), (J), (M), (N), (O), (T), (U) and §§ 1.10(F)(1) through 1.10(F)(7), (2), (3), (5), (6), (7) of this Part. Rules 8.03, 8.04, 8.05, 8.06, 8.07, 8.08, 8.09, 8.10, 8.11, 8.12, 8.15, 8.17, 8.21 and 8.22. UST systems storing heating oil of any grade for on-site consumption solely for heating purposes at residential properties are also exempt from § 1.10(F)(4) of this Part.

B. General Operations and Maintenance:

1. All USTs shall be maintained and operated by trained personnel and in compliance with ~~the~~ applicable national codes of practice, including but not limited to: -"Bulk Liquid Stock Control at Retail Outlets", incorporated above atin § 1.3(T) of this Part; "Management of Underground Petroleum Storage Systems at Marketing and Distribution Facilities", incorporated above atin § 1.3(U) of this Part; "Code for Motor Fuel Dispensing Facilities and Repair Garages", incorporated above atin § 1.3(X) of this Part; "Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment", incorporated above atin § 1.3(Z) of this Part; "Recommended Practices for the Inspection and Maintenance of UST Systems", incorporated above atin § 1.3(AA) of this Part; and "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities", incorporated above atin § 1.3(BB) of this Part. ~~for the handling and storage of petroleum or hazardous materials as listed in Appendix B.~~

2. Facilities subject to leak detection requirements shall prominently post or provide in a location readily accessible ~~available~~ to the facility staff ~~operators of UST systems~~ emergency response procedures, including instructions on responding to alarms, releases, spills, and other abnormal events, and include current contact information for the Class A and B operator. ~~written instructions pertaining to the operation of leak detection equipment, as well as spill response procedures~~

3. Facilities subject to inventory recordkeeping requirements shall comply with § 1.13(B) of this Part. Rule 11.03 Inventory Record-keeping and Leak Reporting.

~~All gasoline dispensing facilities (including retail, commercial, and municipal stations) subject to Stage I and Stage II vapor controls shall comply with the RI DEM Office of Air Resources Air Pollution Regulation No. 11: Petroleum Liquids Marketing and Storage.~~

4. Compatibility

- a. ~~_____ All new or replacement tank and/or piping systems shall be made of, or lined with, materials that are compatible with the substance(s) stored.~~ The filling of a UST system and storage of any regulated substance which exceeds 10% ethanol or 20% biodiesel is prohibited without prior written notification to, and approval from, the Department. The owner/operator shall not introduce, or allow to be introduced, any material into a UST system that is incompatible with the UST system.

- b. The owner/operator shall demonstrate compatibility of the UST system (including the tank, piping, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill equipment) by using one of the following options:

(1) Certification or listing of UST system equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored.

(2) Equipment or component manufacturer approval. The manufacturer's approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer.

(3) Another method of demonstrating compatibility approved by the Director.

~~_____ The use of ethanol motor fuel which exceeds 10% ethanol in gasoline is prohibited without prior written notification by the owner/operator to the~~

~~Department along with submission of documentation that the entire UST system is compatible~~

5. Correct Filling Practices

a. _____ All UST facilities shall establish procedures for determining the available storage capacity of each of its tanks and shall comply with those procedures and communicate the available capacity to delivery personnel before allowing any product to be delivered to the facility's tank(s). Facilities shall also establish procedures to monitor deliveries ~~in order to~~ prevent tank overfills and product spillss.

b. The UST system must be monitored at all times during a delivery to ensure that there are no leaks, releases, malfunctions, or hazardous situations developing and the deliverer must be able to immediately stop the flow of fuel in the event of a malfunction or release. The amount of the fuel delivery should be known in advance based upon the maximum amount of usable space remaining in each UST and the amount of fuel delivered should never exceed the ullage volume of the UST. The volume of fuel delivered must be carefully monitored and the deliverer should not rely on the overfill protection device to alert them to stop the delivery.

6. Above-Ground Components

a. All above-ground sections of the UST system, including dispensers, nozzles, dispenser hoses, above-ground fills, and vent lines, shall be routinely inspected for evidence of excessive wear, degradation, damage, or release.

(1) All dispenser hoses must be adequately supported and shall not make contact with the ground when not in use.

(2) Any component which shows excessive wear, damage, or evidence of release must be taken out of service until repaired or replaced.

(3) All dispenser hose breakaway devices must be inspected monthly. Any dispenser hose breakaway device which shows evidence of damage, malfunction, product release, or has exceeded the manufacturer's expiration date must be immediately replaced. Any breakaway device which has been activated or otherwise separated must be replaced unless the manufacturer explicitly allows re-assembly and re-use after activation.

C. Facility Compliance - Environmental Results Program

1. The Environmental Results Program (ERP) is a mandatory facility compliance inspection program. Owners/operators shall ensure that their facilities comply with these regulations by conducting their own inspections and certifying their compliance by completing and submitting a Compliance Certification Checklist & Forms Booklet (the “ERP Certification Booklet”).
 - a. At least every three ~~(3)~~ years, the Department will issue an ERP Certification Booklet to all operating UST facilities. The ERP Certification Booklet will include the following:
 - (1) Non-Applicability Statement.
 - (2) Compliance Certification Checklist.
 - (3) Certification Statement.
 - (4) Return to Compliance Form.
 - b. Along with the ERP Certification Booklet, the Department will also issue an ERP Compliance Certification Workbook (the “ERP Workbook”). The ERP Workbook will provide guidance to owners/operators regarding the performance of their ERP inspection and instructions for completing and submitting the ERP Certification Booklet.
 - c. Owners/operators shall return the completed ERP Certification Booklet to the Department within the time frame specified by the Director.
 - d. Neither the ERP Certification Booklet nor the ERP Workbook shall be construed to be a substitute for, or to waive, replace or supersede the requirements of these regulations. In the event of any conflict between these regulations and the ERP Certification Booklet or the ERP Workbook, these regulations shall prevail.
 - e. Neither the ERP Certification Booklet nor the ERP Workbook shall be construed to be an exhaustive compliance review. The Department reserves the right to target specific compliance issues through the ERP certification process without waiving any of the other requirements of these regulations.
 - f. Compliance with the ERP requirements contained in this rule shall not limit the Director’s right to inspect any UST facility and its records at any reasonable time, with or without notice.
 - g. Nothing in this rule shall be construed to prohibit the Director from issuing ERP Certification Booklets more often than every three years. The Director may also issue ERP Certification Booklets to all UST facilities, individual UST facilities or targeted groups of UST facilities.

D. Mandatory Deadline for Permanent Closure of Single-Walled UST Systems (Tanks and/or Piping)

1. All existing tank and product pipeline and associated systems without secondary containment shall be permanently closed as follows:
 - a. With the exception of UST systems that store fuel oil of any grade that is consumed on-site solely for heating purposes, all single-walled tanks and/or piping installed prior to May 8th, 1985 shall be permanently closed by December 22nd, 2017.
 - b. With the exception of UST systems that store fuel oil of any grade that is consumed on-site solely for heating purposes, all single-walled tanks and/or piping installed between May 8th, 1985 and July 20, 1992 shall be permanently closed within thirty-two (32) years of the date of installation. If the installation date is not known, all single-walled USTs and/or piping must be permanently closed immediately.

E. ~~Corrosion Protection~~ Mandatory Corrosion Protection Requirements for Tank Systems

1. Except as provided in § 1.10(A) ~~Rule 8.01~~ of this Part ~~above~~, the owners/operators of existing UST facilities shall have provided for corrosion protection of all unprotected steel tanks and metallic piping no later than December 22, 1998. Facilities shall have provided for corrosion protection by either:
 - a. Closing all tank systems which did not meet corrosion protection standards, and installing new or replacement tanks and piping which comply with § 1.11 of this Part. ~~Rule 9 New and Replacement Tank System Requirements.~~
 - b. Installation of an approved cathodic protection system to provide adequate corrosion protection for all existing tanks and piping. ~~to provide for corrosion protection through:~~

~~Interior Lining~~ 2. Interior lining is no longer accepted as a method of corrosion protection. However, USTs lined prior to the effective date of these regulations are required to be inspected as follows:

- a. Within 10 years after lining, and every five years thereafter, the lined tank shall be internally inspected in accordance with the standards for "Entry, Cleaning, Interior Inspection Repair and Lining of Underground Storage Tanks" incorporated above at ~~in~~ § 1.3(S) of this Part and with "Interior Lining and Periodic Inspections of Underground Storage Tanks", incorporated above at ~~in~~ § 1.3(R) of this Part. Follow-up internal inspections of lined tanks are not required when the tank has external cathodic protection meeting the requirements of § 1.10 of this Part.

- b. Any pitting, tearing, discoloration, failure to adhere to the tank structure, or other damage shall be considered a lining failure. The USTs must be removed from service and permanently closed within 90 days.
 - c. Failed lining inspections must be reported to the Department by the inspector within 24 hours and the final report/results are to be submitted within 15 calendar days.
 - d. Records of all tank lining inspections are required to be permanently kept in accordance with § 1.13(B)(1)(a) of this Part. ~~Rule 11.02(A) Permanent Records.~~
3. All cathodic protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank system that ~~regularly~~ contains regulated substances and is in contact with the ground.
4. All UST systems equipped with cathodic protection must be inspected and tested for proper operation by a qualified cathodic protection tester in accordance with the following requirements:
- a. All impressed current cathodic protection systems must be surveyed within ~~6~~six months of installation or repair, at least every ~~2~~two years following the installation date, and whenever construction or maintenance in the area of the structure occurs. The operational survey should include the following:
 - (1) A minimum of three measurements of anode-to-structure resistance and structure-to-electrolyte resistance for each protected component;
 - (2) A minimum of three measurements of structure-to-reference electrode potentials at all test stations (perform testing to verify structure polarization in accordance with the standards set forth in "Control of External Corrosion on Underground or Submerged Metallic Piping Systems" incorporated above at § 1.3(N) of this Part ~~NACE RP-0169-2002~~SP0169-2013 or ~~RP0285-2002~~"External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection", SP0285 as above at incorporated above at § 1.3(P) of this Part ~~2011~~);
 - (3) Verification of the accuracy of the display module readings;
 - (4) Adjustment of rectifier as required;
 - (5) Submission of written report of findings, to be kept in accordance with the permanent recordkeeping requirements cited in § 1.13(B)(1)(a) of this Part. ~~Rule 11.02(A).~~

5. All sacrificial anode (galvanic or sti-P3) systems must be tested within 6six months of installation or repair, at least every 3three years following the installation date, and whenever construction or maintenance in the area of the structure occurs, in order to determine that the tank-to-soil potential reading relative to copper is -850 millivolts or more negative. A minimum of three measurements for each protected component is required.
6. The criteria used to determine whether a cathodic protection system provides adequate cathodic protection must be in accordance with a nationally recognized code of practice, including but not limited to: -"Standard for Safety External Corrosion Protection Systems for Steel Underground Storage Tanks, 3rd Editions", incorporated above atin § 1.3(M) of this Part; -"Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems", incorporated above atin § 1.3(N) of this Part; -"Control of External Corrosion on Underground or Submerged Metallic Piping Systems", incorporated above atin § 1.3(O) of this Part; -"External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection", incorporated above atin § 1.3(P) of this Part; and "Recommended Practice for the Addition of Supplemental Anodes to sti-P3 USTs", incorporated above atin § 1.3(Q) of this Part, -listed in Appendix B.
7. All data collected during the cathodic protection survey, as well as the final results must be submitted by the tester and/or the testing company within 15 calendar days of completion of a passing test and seven calendar days for failed or inconclusive tests. Submittals containing missing, incorrect, or falsified information, or results which do not follow the correct methods, will not be accepted and will invalidate the results of the test. Any survey which shows that components are not receiving adequate corrosion protection must be reported to DEM within 24 hours.

~~Failed tests or surveys must be reported to the Department by the tester within 24 hours, and the results are to be submitted within 15 days.~~
8. USTs with impressed current cathodic protection systems must also be inspected every 60 days by the owner/operator or designee to ensure the equipment is running properly. The following tasks must be performed:
 - a. Read and record the rectifier DC current output;
 - b. Read and record the rectifier DC voltage output;
 - c. Inspect the rectifier for physical damage.
9. For UST systems using cathodic protection, records of the operation, repair and testing of the cathodic protection system must be permanently kept in accordance with § 1.13(B)(1)(a) of this Part. ~~Rule 11.02 (A) Permanent Records.~~
10. Cathodic protection systems shall not be shut off or deactivated at any time except for repair. Any malfunction must be repaired within 30 days of the first

occurrence. If the device cannot be repaired within 30 days, then the affected UST system(s) shall be temporarily closed in accordance with § 1.15(C) of this Part ~~Rule 13.03 of these Regulations~~ until satisfactory repairs are made.

~~Malfunctioned~~Any cathodic protection systems which is unable to be repaired or has not been repaired systems not repaired within within 180 days of any failed survey or test date will require the UST to be permanently closed in accordance with § 1.15(D) of this Part ~~Rule 13.05~~. Any deactivation or failure of a corrosion protection system shall be reported within 24 hours to the Department by the owner/operator or designee.

11. Repairs, ~~to~~ or replacements of existing UST cathodic system components, including the addition of supplemental anodes, require prior approval from the Department and shall be performed in accordance with "External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection", incorporated above atin § 1.3(P) of this Part NACE RP0285-2002SP0285-2011 and/or the "Recommended Practice for the Addition of Supplemental Anodes to sti-P3 USTs", incorporated above atin § 1.3(Q) of this Part STI-R972-as, January 2006December 201. 0. A report detailing the type and extent of work shall be submitted to the Director within thirty ~~(30)~~ days of work completion.

F. Leak Detection for Existing Tanks - Except as provided in ~~this SectionRule 8.01 above~~, owners/operators of all existing facilities shall comply with the applicable leak detection requirements:

1. Double-Walled USTs - The following requirements apply to all double-walled USTs except those used for heating fuels for on-site use, emergency generators and waste oil/motor oil. See §§ 1.10(F)(4), through (6) of this Part ~~Rules 8.08(D), 8.08 (D) and 8.08 (E)~~ for requirements for heating fuel, emergency generators and waste oil/motor oil USTs, respectively.
 - a. ~~Install and operate a continuous i-~~Interstitial space electronic monitoring system consistent with the requirements in §§ 1.11(N) ~~and 1.11(O)~~ of this Part ~~Rules 9.15 and 9.17~~ shall be installed and operational at all times.
 - b. Double-walled USTs with a brine solution or other inert liquid in the interstitial space are not required to be routinely tested for tightness and instead shall be continuously monitored for a change in fluid level in the reservoir and interstice. Any change in the brine or inert fluid in the interstitial and/or annular space shall be reported to DEM immediately by calling (401) 222-2797.
 - c. A test for tightness on all USTs with a "dry" interstitial and/or annular space shall be performed when the tank has been installed for a period of twenty years, and once every two -years thereafter.

- d. Interstitial space testing methods shall be consistent with the tank manufacturer's protocol or an alternative ~~recognized~~ method approved by the Director.
- e. Tightness tests shall be conducted in accordance with the requirements of § 1.10(H) of this Part.

~~Testing results shall be submitted to the Director within fifteen (15) calendar days of the test date and shall include the start and end vacuum readings, test duration, and water table (as referenced from the tank bottom).~~

~~(e) All suspected or confirmed leaks/releases and failed or inconclusive tests shall be immediately reported and promptly investigated in accordance with Rule 12 Leak and Spill Response.~~

~~(g) The owner/operator must have the contents of a UST system for which test results are fail or inconclusive completely removed within 24 hours, or a retest of the UST system must be arranged by the owner/operator and the retest conducted within 3 days.~~

- f. If the results of an interstitial space tightness test retest are fail or inconclusive, then the owner/operator must have the primary wall tightness tested within 24 hours.

- (1) If the primary tank is demonstrated as being tight, the UST shall be repaired within 30 calendar days and in accordance with § 1.12 of this Part. Any product remaining in the tank must be consumed or removed within 30 days, and no additional product may be added.

- (2) If the primary ~~tank~~ wall is unable to be tested, is inconclusive, or fails tightness testing, the contents of the tank must be removed within 24 hours.

- (3) Within 30 days and prior to the addition of any product to the tank, a repaired UST must undergo an additional interstitial tightness test to confirm the tanks has been adequately repaired.

- (4) If the UST is unable to be repaired within 30 days and in accordance with § 1.12 of this Part ~~Rule 10, Facility Modification or Repair~~, the UST must be temporarily or permanently closed in accordance with ~~§ 1.15(D)~~ § 1.15(D) of this Part. Variances to allow single-wall operation ~~or temporary closure~~ are not permitted.

~~— If the results of a UST system retest fail or are inconclusive, then the owner/operator must have the contents of the UST system completely removed within 24 hours of the retest.~~g. Test results are to be

maintained at the facility at all times as permanent records in accordance with § 1.13(B)(1)(a) of this Part. ~~Rule 11.02(A).~~

2. Single-Walled USTs - Leak detection requirements as follows:

- a. ~~Install and o~~perate an approved automatic tank gauging system that tests for loss or gain of the contents stored, and is consistent with the requirements in § 1.11(D) of this Part. ~~Rule 8.15. Single-walled USTs installed prior to October 1984 are required to have automatic tank gauging by December 22, 1998. Single-walled USTs installed between October 1984 and July 1992 are required to have automatic tank gauging upon tank installation. The installation of new single-walled USTs has been prohibited since July 1992~~
- b. Perform a leak test capable of detecting a leak rate of 0.2 gallons per hour or less at least once per month. For manifolded USTs a leak test is required for each tank separately (or a continuous statistical leak detection system certified for manifolded tank applications and meeting U.S. E.P.A. performance standards can be used). All leak test results shall be maintained on-site at all times in accordance with § 1.13(B)(1)(b) of this Part. ~~Rule 11.02(B).~~
- c. Perform daily and monthly inventory recordkeeping consistent with § 1.13(C) of this Part ~~Rule 11.03~~. Inventory records are required to be maintained on-site at all times in accordance with § 1.13(B)(1)(b) of this Part. ~~Rule 11.02(B), Routine Record-keeping.~~

~~Perform a tank tightness test at five-year intervals once a monitoring device has been installed, until such time as the tank has been installed for a period of twenty years; thereafter, tank tightness tests shall be conducted once every two years. Single-walled tanks that have been installed for a period of thirty (30) years shall have a tightness test performed annually beginning in 2015, and all single-walled tanks shall be permanently closed in accordance with the schedule outlined in Rule 8.04. Tank tightness tests shall be consistent with Rule 8.10.d. Perform a tank tightness test annually and in accordance with the requirements of § 1.10(H) of this Part.~~

3. Single-Walled USTs Upgraded with Interior Lining and/or Cathodic Protection - Leak detection requirements as follows:

- a. Install and operate an approved automatic tank gauging system that tests for loss or gain of the substance stored and is consistent with the requirements in § 1.10(M) of this Part. ~~Rule 8.15.~~
- b. Perform a leak test capable of detecting a leak rate of 0.2 gallons per hour or less at least once per month. For manifolded USTs a leak test is required for each tank separately (or a continuous statistical leak

detection system certified for manifolded tank applications and meeting U.S. E.P.A. performance standards can be used). All leak test results shall be maintained in accordance with § 1.13(B)(1)(b) of this Part. ~~Rule 11.02(B).~~

- c. Perform daily and monthly inventory recordkeeping consistent with § 1.13(C) of this Part ~~Rule 11.03~~. Inventory records are required to be maintained in accordance with § 1.13(B)(1)(b) of this Part. ~~Rule 11.02(B), Routine Record-keeping.~~
- d. Perform a tank tightness test annually and in accordance with the requirements of § 1.10(H) of this Part.

~~For USTs upgraded with interior lining and/or cathodic protection in accordance with Rule 8.06 and/or Rule 8.07, annual tightness testing is required in conjunction with inventory record keeping and shall be a permissible leak detection method for a period no longer than ten (10) years after the date of the upgrade. After ten years, a leak detection method that provides for continuous monitoring must be installed consistent with Rules 8.08(C)(1) and (2) and Rule 8.15.~~

4. Heating Oil USTs

- a. UST facilities with single-walled USTs containing heating oil of any grade consumed solely on-site for heating purposes at commercial or industrial facilities are required to undergo tightness testing according to the following schedule:
 - (1) USTs installed prior to 12/31/1970 must be tested prior to 12/31/2021 and every 5 years thereafter
 - (2) USTs installed between 1/1/1971 - 12/31/1980 must be tested prior to 12/31/2022 and every 5 years thereafter
 - (3) USTs installed between 1/1/1981 - 12/31/1990 must be tested prior to 12/31/2023 and every 5 years thereafter
 - (4) USTs installed between 1/1/1991 - 12/31/2000 must be tested prior to 12/31/2025 and every 5 years thereafter
 - (5) USTs installed between 1/1/2001 - 12/31/2010 must be tested prior to 12/31/2027 and every 5 years thereafter
 - (6) USTs installed after 1/1/2011 must be tested when they reach 30 years of age and every 5 years thereafter once the tanks have been installed for a period of 20 years and every five years thereafter. Once the tanks have been installed for a period of 30 years, tightness testing is required every three years.

(7) For USTs where the installation date is unknown, the USTs must be tested prior to December 31st, 2021 and every five years thereafter January 1st, 2020 and every three years thereafter.

(8) In the event a UST is constructed of concrete and is unable to be tightness tested using approved methods, a subsurface investigation shall be conducted on the same schedule outlined in § 1.10(F)(4)(a) of this Part.

b. UST facilities with double-walled USTs with a dry interstitial space that contain heating oil of any grade are required to undergo an interstitial tightness test once the tanks have been installed for a period of 30 years and every five years thereafter unless they are equipped with an interstitial space monitor.

(1) For USTs where the installation date is unknown, the UST(s) must be tested prior to December 31st, 2021 January 1st, 2020 and every five years thereafter.

c. Double-walled USTs with a brine solution or other inert liquid in the interstitial space are not required to undergo interstitial tightness testing as long as the interstitial space is continuously monitored for a change in fluid level via approved leak detection equipment.

d. Tightness tests shall be conducted in accordance with the requirements of § 1.10(H) of this Part.

5. Emergency Generator and Diesel Generator USTs

a. USTs serving an emergency ~~diesel~~ generator, and/or and USTs whose stored substance serves both an emergency ~~diesel~~ generator and an on-site boiler, shall comply with leak detection requirements as follows:

(1) Single-walled USTs used for emergency generators are required to undergo tightness testing biennially (e.g., once every two years).

(2) Single-walled USTs are required to install and operate an approved automatic tank gauging system that tests for loss or gain of the contents stored, and is consistent with the requirements in § 1.10(M) of this Part.

(3) Double-walled USTs shall be equipped with a continuous interstitial space electronic monitoring system consistent with the requirements in §§ 1.11(N) and ~~(1.11(P))~~ of this Part.

(4) Double-walled USTs with a brine solution or other inert liquid in the interstitial space are not required to undergo interstitial

tightness testing as long as the interstitial space is continuously monitored for a change in fluid level via approved leak detection equipment.

- (5) All double-walled USTs used for emergency generators with a dry interstitial space are required to undergo an interstitial tightness test once the tanks have been installed for a period of 30 years and every two years thereafter.
- (6) Tightness tests shall be conducted in accordance with the requirements of § 1.10(H) of this Part.
- (7) If the results of an interstitial space tightness test are fail or inconclusive, then the owner must have the primary wall tightness tested within 24 hours. If the primary tank is demonstrated as being tight, the UST shall be repaired within 30 calendar days and in accordance with § 1.12 of this Part. Any product remaining in the tank must be consumed or removed within 30 days, and no additional product may be added. If the primary wall is unable to be tested, is inconclusive, or fails tightness testing, the contents of the tank must be removed within 24 hours. Within 30 days and prior to the addition of any product to the tank, a repaired UST must undergo an additional interstitial tightness test to confirm the tanks has been adequately repaired. If the UST is unable to be repaired within 30 days and in accordance with § 1.12 of this Part, the UST must be permanently or temporarily closed in accordance with § 1.15(D) of this Part. Variances to allow single-wall operation are not permitted.

- b. Diesel generator USTs used for the production of commercial electricity are regulated in accordance with §§ 1.10(F)-(1) and 1.10(F)(2) of this Part. Rules 8.08(A) and (B).

~~Double-walled USTs shall be equipped with a continuous interstitial space electronic monitoring system consistent with the requirements in Rules 9.15 and 9.17. A test for tightness on the interstitial space between the tank's walls shall be performed when the tank has been installed for a period of twenty years, and every two (2) years thereafter, in accordance with Rule 8.08 (A)(3).~~

~~Single-walled UST leak detection requirements are as follows:~~

~~Install and operate an approved automatic tank gauging system that tests for loss or gain of the contents stored and is consistent with the requirements in Rule 8.15. Single-walled USTs installed prior to October 1984 are required to have been equipped with automatic tank gauging by December 22, 1998. Single-walled USTs installed between October 1984 and July 1992 are required to have been equipped with automatic tank~~

~~gauging upon tank installation. The installation of single-walled USTs after July 1992 is prohibited.~~

~~Perform a leak test capable of detecting a leak rate of 0.2 gallons per hour or less at least once per month. For manifolded USTs a leak test is required for each tank separately (or a continuous statistical leak detection system certified for manifold tank applications and meeting U.S. E.P.A. performance standards can be used). All leak test results shall be maintained in accordance with Rule 11.02(B), Routine Record-keeping.~~

~~(c) Perform a tank tightness test at five year intervals once a monitoring device has been installed, until such time as the tank has been installed for a period of twenty years; thereafter, tank tightness tests shall be conducted once every two years. Single-walled tanks that have been installed for a period of thirty (30) years shall have a tightness test performed annually beginning in 2015, and all single-walled tanks shall be permanently closed in accordance with the schedule outlined in Rule 8.04. Tank tightness tests shall be consistent with Rule 8.10.~~

6. Waste Oil USTs and Motor Oil USTs - UST's used to store waste oil or motor oil shall comply with leak detection requirements as follows:

a. Double-walled USTs shall be equipped with a continuous interstitial space electronic monitoring system consistent with the requirements in §§ 1.11(N) and 1.11(P) of this Part. ~~Rules 9.15 and 9.17.~~ A test for tightness on the interstitial space between the tank's walls shall be performed when the tank has been installed for a period of 30 years and every two ~~(2)~~ years thereafter, in accordance with § 1.10(F)(1) of this Part. Rule 8.08 (A)(3).

b. Double-walled USTs with a brine solution or other inert liquid in the interstitial space are not required to have this test performed and instead shall be continuously monitored for a change in fluid level in the reservoir and interstice.

~~c. Single-walled USTs with a capacity of less than or equal to 2,000 gallons shall comply with either (1) or (2) below:~~

~~(1) ATG and Tank Tightness Testing:~~

~~Install and operate an approved automatic tank gauging system that tests for loss or gain of the contents stored and is consistent with the requirements in 10 Rule 8.15.~~

~~Perform a leak test capable of detecting a leak rate of 0.2 gallons per hour or less at least once per month. For manifolded USTs a leak test is required for each tank separately (or a continuous statistical leak~~

~~detection system certified for manifold tank applications and meeting U.S. E.P.A. performance standards can be used). Leak test results shall be maintained in accordance with 3 Rule 11.02(B).~~

~~Perform a tank tightness test at five year intervals once a monitoring device has been installed, until such time as the tank has been installed for a period of twenty years; thereafter, tank tightness tests shall be conducted once every two years. . Single-walled tanks that have been installed for a period of thirty (30) years shall have a tightness test performed annually beginning in 2015, and all single-walled tanks shall be permanently closed in accordance with the schedule outlined in 10 Rule 8.04. Tank tightness tests shall be consistent with 10 Rule 8.10.~~

- c. Single-walled USTs with a capacity greater than 2,000 gallons shall comply with the following requirements:
- (1) Install and operate an approved automatic tank gauging system that tests for loss or gain of the contents stored and is consistent with the requirements in § 1.10(M) of this Part. ~~Rule 8.15.~~
 - (2) Perform a leak test capable of detecting a leak rate of 0.2 gallons per hour or less at least once per month. For manifolded USTs a leak test is required for each tank separately (or a continuous statistical leak detection system certified for manifold tank applications and meeting U.S. E.P.A. performance standards can be used). Leak test results shall be maintained in accordance with § 1.13(B)(1)(b) of this Part. ~~Rule 11.02(B).~~
 - (3) Perform a tank tightness test at five year intervals once a monitoring device has been installed, until such time as the tank has been installed for a period of twenty years; thereafter, tank tightness tests shall be conducted once every two years. Single-walled tanks that have been installed for a period of thirty (30) years shall have a tightness test performed annually beginning in 2015, and all single-walled tanks shall be permanently closed in accordance with the schedule outlined in § 1.10(D) of this Part.~~Rule 8.04.~~ Tank tightness tests shall be consistent with § 1.10(H) of this Part. ~~Rule 8.10~~
- d. Single-walled USTs with a capacity of less than or equal to 2,000 gallons shall comply with either § 1.10-(F)(6)(c) of this Part or with the manual tank gauging and tightness testing requirements listed below: ~~(1) or (2) below~~

~~Manual Tank Gauging and Tank Tightness Testing:~~

- (1) Perform an annual tank tightness test consistent with ~~§ 1.10(H) of this Part.~~ § 1.10(H) of this Part. ~~Rule 8.10.~~

(2) Perform inventory recordkeeping and leak reporting as follows:

~~(AA)-~~ Once a week take the tank out of service for a period of 36 hours.

~~(BB)-~~ Take liquid level measurements before and after the 36-hour shut down period.

~~(CC)-~~ Once a month reconcile your 4 weeks of data in accordance with [the Department's Manual Tank Gauging Record Sheet, Appendix D.](#)

7. Heating Oil USTs Used for Off-Site Consumption

a. ~~_____~~ UST systems storing heating oil of any grade that is consumed off-site shall comply with the leak detection requirements outlined in ~~§§ 1.10(F)(1) through 1.10(F)(3) of this Part.~~ [Rules 8.08\(A\), \(B\), and \(C\).](#)

G. Leak Detection for [Product Pipelines](#)~~Piping~~:

1. Except as provided in § 1.10 of this Part~~Rule 8.01 above~~, all UST facility owners/operators shall ensure that all existing product pipelines associated with their UST facilities are compliant with ~~shall comply with one or more of~~ the following requirements. Product pipelines~~Piping~~ that are~~is~~ contained inside a trench or trough (e.g. "Fiber-Trench") shall be considered single-walled.

2. Double-Walled [Product Pipelines](#)~~Piping~~

a. All double-walled product piping shall be equipped with continuous electronic ~~Requires~~ interstitial or annular space monitoring that is consistent with §§ 1.11(N) and ~~1.11(P)~~ of this Part. [Rules 9.16 and 9.17.](#)

b. Tightness testing of the interstitial or annular spaces of double-walled product piping is required ~~Requires a test performed on the secondary containment pipe~~ as follows:

(1) A test for tightness on the interstitial space shall be performed upon installation and when the piping system ~~has been~~ installed has been installed for a period of twenty years, and once every ~~2~~two years thereafter.

(2) Interstitial space testing shall be consistent with the piping manufacturer's protocol or an alternative recognized method [approved by the Director.](#)

c. [Tightness tests shall be conducted in accordance with the requirements of § 1.10\(H\) of this Part.](#)

~~Such testing shall be performed by a 3rd party persons and businesses licensed in accordance with 66Rules 14.04 and 14.05.~~

~~Testing results shall be submitted to the Director within fifteen (15) calendar days of from of the test date and shall include the start and end pressure readings and test duration. All suspected or confirmed leaks/releases, and failed tests and/or inconclusive tests shall be immediately reported and promptly investigated in accordance with Rule 12 Leak and Spill Responsec. A Release Characterization Report shall be submitted by the owner/operator to the Director within seven (7) days for any failed test results which are fail or inconclusive tests.~~

- d. If the results of an interstitial space tightness test are fail or inconclusive, then the owner must have the primary product pipeline wall tested for tightness within 24 hours.
- (1) If the primary product pipeline wall is demonstrated as being tight, the outer wall of the product pipelines shall be repaired within 30 calendar days and in accordance with § 1.12 of this Part. Any product remaining in the UST system, including any tanks that the product pipeline services, must be consumed or removed within 30 days. Additional product may not be added to any UST which services a product pipeline which has failed an interstitial space test.
 - (2) Within 30 days of a repair and prior to placing the piping system back into regular operation, any repaired product pipeline shall be retested.
 - (3) ~~If the primary product pipeline wall tightness is unable to be tested, is inconclusive, or fails tightness testing, the contents of the UST system must be removed within 24 hours and all product pipelines emptied.~~ All product pipeline interstitial space tightness test reports shall be maintained by the owner/operator on-site at all times as permanent records in accordance with § 1.13(B)(1)(a) of this Part.
 - (4) ~~If the primary wall of the product pipeline wall tightness is unable to be tested, is inconclusive, or fails tightness testing, the tester must immediately notify DEM and the owner shall immediately take the UST system out of service and the contents of the UST system must be removed within 24 hours and all product pipelines emptied.~~
 - (5) If the product pipeline is unable to be repaired within 30 days and in accordance with § 1.12 of this Part, the product pipeline must be permanently closed or replaced. Variances to allow single-wall operation or temporary closure are not allowed.

~~Within three days of a failed or inconclusive interstitial space tightness test, tThe owner/operator shall must have the carrier or primary pipeline tightness tested for tightness in accordance with Rule 8.10 within 3 days of a failed or inconclusiveness interstitial space test. If the primary pipeline fails the tightness tests as fail or if the test is inconclusive, then the pipeline shall be taken out of service immediately. If the primary pipe passes the tests as pass, then the secondary containment pipeline shall be repaired within 30 calendar days.~~

~~A repaired secondary containment pipe shall be retested prior to placing the piping system back into regular operation. If the repaired secondary pipe tests as fail or inconclusive, then the owner/operator shall have the line taken out of service immediately.~~

~~Test results shall are to be maintained by the owner/operator as permanent records in accordance with Rule 11.02(A).~~

~~In accordance with Rule 10.04(C) of the regulations, aA qualified environmental consultant is required to be on-site during all excavation activities, in accordance with Rule 10.04(C).~~

3. Single-Walled Product PipelinesPiping: Must comply with the following:

- a. All single-walled product pipeline, including pressurized, U.S. suction, and European suction, shall be tested for tightness by a 3rd party licensed tightness tester upon installation and then annually thereafter.

~~Pressurized Pipelines~~

- ~~(a) — All tank systems equipped with pressurized piping shall have performed a line tightness test upon installation and annually thereafter. eline tightness then~~

~~(2) Suction Pipelines~~

~~With the exception of “European” or “safe suction” systems (no valve at the tank), owners/operators of all tank systems equipped with suction product pipelines piping shall have a pipeline tightness test performed by a licensed tightness tester upon installation, 5, 8, 11 and 13 years following installation, and then annually thereafter.~~

~~Owners/operators of “European” or “safe suction” product pipeline piping systems, which have the check valve located at the base of the dispensing unit or pump and have no valve at the tank, shall have a pipeline tightness test performed by a licensed tightness tester upon installation, 5, 8, 11 and 13 years following installation, and then once every two years thereafter. When the product pipelineing system has been installed for a period of thirty (30) years, a pipeline tightness test~~

~~shall be performed by a licensed tightness tester annually beginning in the year 2015.~~

- b. ~~Product pipeline~~ tightness tests shall be consistent with § 1.10(H) of this Part. ~~Rule 8.10.~~
- c. Electronic line leak detectors that are third-party certified to meet U.S. E.P.A. performance standards ~~can~~ may be used to satisfy ~~§ 1.10(G)(3)(a) of this Part. Rule 8.09(C)(1).~~ Such equipment shall be utilized to perform an annual a 0.1 gallon-per-hour precision pressure leak test at least once per year at full pump pressure and under normal operating conditions. All 0.1 GPH gallon-per-hour precision test reports ~~Test results are shall~~ to be maintained as permanent records in accordance with ~~§ 1.13(B)(1)(a) of this Part. Rule 11.02(A).~~ All failed or inconclusive tests shall be immediately reported to the Director by the tester in accordance with § 1.14 of this Part. with Rule 12 Leak and Spill Response. Electronic line leak detectors shall also be tested annually for proper operation by qualified personnel certified by the manufacturer and in accordance with § 1.10(I) of this Part. ~~Rule 8.11.~~
- d. ~~All single-walled product pipelines piping shall be permanently closed in accordance with the schedule outlined in § 1.10(D) of this Part. Rule 8.04.~~
- d. Alternative leak detection methods for product pipelines piping that are equivalent in accuracy and reliability to the methods listed may be approved by the Director pursuant to § 1.20 of this Part. ~~Rule 18 Variances.~~

H. Tank, Product Pipeline, and Interstitial Space Tightness Testing Requirements: ~~Tank, product pipeline, and line tightness interstitial tightness~~ testing shall be consistent with the following:

1. Tightness test methods results shall ~~must~~ be capable of detecting a 0.1 gallon-per-hour leak rate from the entire tank system, while accounting for the effects of thermal expansion or contraction of product, vapor pockets, tank deformation, evaporation, condensation, and the location of the water table. The probability of detection shall be no less than 95 percent and the probability of a false alarm shall be no more than five ~~5~~ percent.
2. All persons who conduct tightness tests on underground storage tanks located in the State of Rhode Island are required to be licensed in accordance with § 1.16 of this Part.
3. The 3rd party licensed tester and/or the licensed testing company performing the test is solely responsible for submitting ~~must submit to the Department a full report to the Owner/Operator of the facility which must be maintained on-site in accordance with Rule 11.02(A). Each tightness test report submitted to shall~~

include, at minimum, the following information: all data collected during the tightness test, including final test results, to the Department.

4. The test data and final results is information must be recorded on the DEM-provided form and submitted by the tester and/or the testing company within 15 calendar days of completion of a passing test and seven calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will be deemed a violation of these regulations.
5. If the results of the tightness test are fail or inconclusive, the tester must immediately report the failed result to DEM by calling (401) 222-2797.
6. In addition to the reporting requirements of § 1.10(H)(4) of this Part, a release characterization report shall be submitted by the owner/operator within seven (7) days for test results which are fail or inconclusive.
 - a. ~~The date on which the test was performed;~~
 - b. ~~The fFacility name and address;~~
 - c. ~~The fFacility owner's name and address;~~
 - d. ~~Identification of the USTs tested, including their volume and stored material;~~
 - e. ~~The bBrand name and type of tightness test equipment used for the test;~~
 - f. ~~Identification of the UST system components tested (e.g., tank and pipelines; tank only);~~
 - g. The pProduct pipelineing type (e.g., pressurized or suction);
 - h. ~~Identification of the DEM-licensed tightness tester who performed the test, and the names of any persons assisting in the test;~~
 - i. ~~Data sheets with the test readings recorded;~~
 - j. ~~Calculations pertaining to the test method and test results;~~
 - k. ~~The lLocation of any groundwater monitoring or tank field observation wells, if they were used in the test procedure;~~
 - l. ~~A dDescription of the method used to measure the water table, if required, and the result;~~
 - m. ~~The sSignature of the DEM-licensed tightness tester who performed the test attesting to the accuracy of the information submitted in the tightness test reportresult;~~

- n. ~~The DEM UST facility identification ID number; and~~
- e. ~~A site plan identifying all tanks on site installed at the subject facility with the tank numbers on the cover sheet corresponding to the tank numbers on the site plan.4.~~
5. ~~Failure to provide the information specified in Rule 8.10(B) may render the test invalid.~~
7. The testing company shall notify the Department of the date that the testing will be conducted at least seven 7 days in advance. ~~All tightness test reports results required in this Rule (including results of failed or inconclusive tests) shall be submitted by the owner/operator to the Director within fifteen (15) calendar days of the date of test completion. All suspected or confirmed leaks/releases and failed or inconclusive tests shall be immediately reported to the Director in accordance with Rule 12 Leak and Spill Response.~~
- ~~All persons who conduct tightness tests on underground storage tanks located in the State of Rhode Island are required to be licensed in accordance with Rule 14 Approval of Tank and/or Line Tightness Tests, Leak Detection Methods and Tightness Tester Licensing Requirements.~~
8. ~~Any DEM-licensed tightness tester or testing company who offers to submit, or otherwise undertakes the burden of, submitting, tightness test reports results to the Department on behalf of the owner/operator of a UST or UST facility shall must submit said test reports results in accordance with the requirements of these Regulations and forward copies of the test reports results to the owner/operator who contracted for the tests. Failure of the licensed tightness tester to comply with these rules section will make the tester, and the company that employs the tester, jointly and severally liable for any penalty assessed by the Department against the owner/operator for the late filing or failure to file the results of these tests and may subject the tester and/or company to penalties under § 1.16(E) of this Part.~~
9. UST, Tank and product pipeline, and interstitial space tightness test reports results are to be maintained on-site as permanent records in accordance with § 1.13(B)(1)(a) of this Part. ~~Rule 11.02(A).~~

I. Line Leak Detectors

1. ~~All underground storage tanks at existing facilities that are equipped with pressurized product pipelines are required to have been be fitted with an approved line leak detection system by 8 May 8,1987. Line leak detectors shall be tested for proper operation by simulating a leak annually and upon installation/replacement by by a trained, qualified 3rd party in persons in accordance with the manufacturer's requirements and procedures by trained, qualified personnel. Mechanical line leak detectors are required to be able to detect a leak ≥ three 3-GPH, while an electronic line leak detector is required to~~

be able to detect a leak of ≥ 0.1 GPH. “Failed” or defective line leak detectors shall be replaced immediately by trained, qualified persons. ~~The o~~Operation of a pressurized product pipeline piping system with a defective or missing line leak detector is prohibited. All data collected during the test, as well as the final results, must be recorded on the DEM-provided form and submitted to DEM and the UST system operator by the tester and/or the testing company within 15 calendar days of completion of a passing test and seven calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will not be accepted and may be rendered invalid. The UST system owner/operator is required to maintain annual test reports shall be maintained by the owner/operator these test results as permanent records~~Records of the annual test results shall be kept,~~ in accordance with § 1.13(B)(1)(a) of this Part. ~~Rule 11.02(A), Permanent Records.~~

J. Shear/Crash/Impact Valves:

1. Remote pumping systems, including dispensers, shall be equipped with an emergency shut-off valve designed to close automatically in the event ~~of a severe impact or fire exposure that a dispensing unit is significantly impacted or exposed to fire.~~ The valves must be securely mounted below grade and in accordance with the manufacturers recommendations and requirements. The automatic closing feature of this valve shall be ~~tested~~checked at the time of installation and at least once a year thereafter by manually tripping the hold-open linkage at the time of installation and at least annually thereafter. “Failed” or defective valves shall be replaced immediately by trained, qualified persons. Testing ~~shall is to be~~ performed by the owner/operator or trained, qualified person~~nel.~~ The test results, test date, and the name of the person performing the test shall be kept in accordance with Rule 11.02(B), Routine Record-keeping. ~~The o~~Operation of a remote pumping system with a defective shear crash valve is prohibited. All data collected during the test, as well as the final results, must be recorded on the DEM-provided form and submitted to DEM and the UST system owner/operator by the tester and/or the testing company within 15 calendar days of completion of a passing test and seven calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will not be accepted and may be rendered invalid. The UST system owner/operator is required to maintain these test results as permanent records, in accordance with ~~_____~~ § 1.13(B)(1)(a) of this Part. Rule 11.02(A), Permanent Records.

K. Anti-Siphon Valves:

1. When~~re~~ an underground storage tank is located at an elevation that produces a gravity head on the dispensing unit, the tank outlet shall be equipped with a device (such as a solenoid valve) that will prevent gravity flow from the tank to the dispenser. This device shall be positioned, installed, and adjusted so that liquid cannot flow by gravity from the tank to the dispenser in the event of a

~~pipelineing or dispenser hose failure that occurs while failure of the piping or hose when~~ the system is not in use.

L. Check Valves:

1. _____ Suction ~~product pipelineing~~ systems shall be equipped with a functioning check valve located directly below, and as close as practical to, the inlet of the suction pump.

M. Operation and Testing of Leak Monitoring Equipment

1. Leak monitoring devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running conditions.
2. Leak monitoring devices shall not be shut off or deactivated at any time except for repair. ~~Any malfunction shall be repaired within fifteen (15) working days of its first occurrence. If the device(s) cannot be repaired within 15 days, then the affected system(s) shall be temporarily closed in accordance with § 1.15(C) of this Part Rule 13.03 until satisfactory repairs are made. The owner/operator shall perform daily manual tank gauging and inventory recordkeeping in the event of a monitoring system malfunction or deactivation. Any deactivation of a monitoring device shall be immediately reported to the Director by the owner/operator.~~
3. Leak monitoring devices shall employ an audible alarm and a visual indicator, which shall be so located as to be readily heard and seen by the ~~owner/operator~~ or other personnel during normal working hours. Covering or otherwise obstructing the view of a monitoring system console is prohibited. ~~The owner/operator shall immediately respond to and investigate a~~All alarms and warnings.
4. All monitoring devices shall be conspicuously marked or labeled as being monitoring devices and shall be secured against vandalism, incidental damage, and improper deactivation.
5. All continuous monitoring systems and alarms shall be checked for proper operation~~tested~~ by the designated Class A or B UST facility operator on a ~~owner/operator on a~~ monthly basis to ensure that they are operating as designed. effectively. ~~Records of such tests shall be maintained by the owner/operator in accordance with §§ 1.10(U)(5)(k) and 1.13(B)(1)(b) of this Part. Rules 8.22(F) and 11.02(B), Routine Record-keeping. If the continuous monitoring system has a battery backup, it must be tested for proper operation on an annual basis.~~
6. Any facility that has a positive shut-down device or configuration which is designed to stop operation of the STP pump or dispensers when liquid is detected in a sump or other indicators of a release are detected, must be checked for proper operation annually by a qualified 3rd party. All positive shut-

down triggers present at the site (e.g., liquid level sensor in sumps) must be activated by the tester to confirm the STP and/or dispensers are disabled as designed.

7. The automatic tank gauge (ATG) shall be removed and inspected for proper configuration and operation annually by a qualified 3rd party contractor.
8. All probes and sensors connected to the continuous monitoring system shall be inspected and tested for proper operation on an annual basis by a qualified 3rd party contractor. At a minimum, the following must be checked:
 - a. The probes and sensors are not coated with or contain significant residual buildup which may impede proper operation;
 - b. If floats are present, they move freely and the shaft is not damaged;
 - c. All cables are free of kinks, breaks, fraying, or other damage;
 - d. Communication and operability between the probes and sensors and the continuous monitoring system is intact.
9. All leak-monitoring devices shall be inspected, calibrated and tested annually to ensure effective operation~~proper operation~~ that is consistent with the manufacturer's specifications. Such testing shall ~~must~~ be performed by trained, qualified persons and in accordance with the manufacturer's requirements and specifications.~~- All data collected during these tests, as well as the final results, must be recorded on the DEM-provided form and submitted to DEM and the UST system owner/operator by the tester and/or the testing company within 15 calendar days of completion of a passing test and seven calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will not be accepted and may be rendered invalid. The UST system owner/operator is required to maintain these test results as permanent records, in accordance with § 1.13(B)(1)(a) of this Part. Rule 11.02(A), Permanent Records. Records of such tests shall be maintained in accordance with Rules 8.15(A) and Rule 11.02(A), Permanent Records.~~

~~Continuous monitoring systems shall must be designed, constructed, and installed so as to detect a 0.2 gallon per hour leak rate from any portion of a tank system that routinely contains product. The probability of detection shall be no less than 95 percent and the probability of a false alarm shall be no more than 5 percent.~~

- N. Spill Containment Basins, Sumps, Under-dispenser containment, and Overfill Prevention

1. Spill Containment Basins

- a. All underground storage tanks are required to have liquid-tight spill containment basins around all fill pipes. Spill containment basins must be capable of holding a minimum of three gallons of liquid. Spill containment basins are required to be properly maintained, in good condition, and kept free of water, product, liquid or debris. Spill containment basins shall be inspected weekly and before and after deliveries.
- b. Single-walled spill containment basins are required to be tested for tightness prior to October 13th, 2020~~1~~ and a minimum of every three years thereafter using a method approved by the Director.
 - (1) Any single-walled spill containment basin which has failed tightness testing must immediately be taken out of service and the associated fill point is ineligible to receive deliveries. DEM must be notified within 24 hours of the failed test by calling (401) 222-2797.
 - ~~-(2)~~ Spill containment basin tightness test results must be submitted to DEM within ~~seven (7)~~ days of the failed test or within ~~fourteen (14)~~ days of a passing test.
- c. Double wall spill containment basins must have an interstitial or annular space that can be continuously or periodically monitored for tightness using a method approved by the Director to be considered double walled. The interstitial or annular space must cover all underground portions of the spill containment basin.
 - (1) The interstitial space of double-walled spill containment basins must be inspected monthly by the "Class A", "Class B", or "Class A/B" operator to ensure the interstitial space is tight beginning October 13th, 2020~~1~~ as part of the monthly inspections required by § 1.10(U)(5)(k) of this Part.
 - (2) If the monitoring device or 3rd party testing indicates the interstitial space is no longer liquid tight, the spill containment basin and associated fill point must immediately be taken out of service.
 - (3) If the interstitial monitoring device or additional testing indicates a failure, but either the primary or secondary wall remains liquid-tight, the spill containment basin may be regulated as single-walled and subject to the requirements of § 1.10(N)(1)(b) of this Part. The spill containment basin must be replaced within 180 days. A written variance from DEM is required prior to commencing operation.

- (4) DEM must be notified within 24 hours of any spill containment basin interstitial monitoring device which indicates primary or secondary wall failure and prior to any replacement.
- (5) All data collected during these tests, as well as the final results, must be recorded on the DEM-provided form and submitted to DEM and the UST system owner/operator by the tester and/or the testing company within ~~fifteen (15)~~ calendar days of completion of a passing test and seven ~~(7)~~ calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will not be accepted and may be rendered invalid. The UST system owner/operator is required to maintain these test results as permanent records, in accordance with § 1.13(B)(1)(a) of this Part.
- d. Double-walled spill containment basins that are not capable of interstitial space tightness monitoring or testing shall be regulated as single-walled and are subject to the requirements of § 1.10(N)(1)(b) of this Part and are required to undergo tightness testing every ~~3~~three years.

2. Overfill ~~Protection~~Prevention:

- a. All underground storage tanks at existing facilities required to be registered by these regulations are required to have overfill ~~protection~~evention in accordance with § 1.11(L) of this Part, with the following exceptions:
 - (1) USTs used to store heating fuels consumed on-site solely for heating purposes and installed prior to July 21, 1992; and
 - (2) USTs that never receive more than 25 gallons at one time.
- b. Overfill prevention equipment must be inspected and tested by October 13, 2020~~1~~ and annually thereafter to ensure that overfill prevention equipment is set to activate at the correct level specified and will activate when regulated substance reaches that level.
 - (1) If an overfill alarm is present, it must be fully functional and visible from all product fill locations. The audible alarm and indicator light must be operational and be activated when product level reaches 90% of indicated capacity. The associated in-tank liquid level sensors must be removed annually and checked for proper operation.
 - (2) If a fill tube overfill prevention device (e.g., "Flapper Valve") is present, it must be removed annually and inspected to ensure it is free from obstructions and that the float moves freely. The tube

length and installation depth must be verified as correct such that it begins to restrict flow at 90%, and completely stop fuel flow when product level reaches 95% of indicated capacity.

- (3) If a flow restriction ball float vent valve is present, it must be removed annually and visually inspected to ensure that it is fully operational, free from obstructions, damage, or missing pieces. The device length and installation depth must be verified as correct such that it begins to restrict flow once the product level reaches 90% of indicated capacity. If a flow restriction ball float vent valve is damaged or otherwise non-functional, it must be removed and replaced with an alternative overfill prevention device. The flow restriction ball float vent valve may not be repaired or replaced for any reason as they are no longer accepted as an approved overfill prevention method for new installations or repairs as outlined in § 1.11(L) of this Part. When installing a new overfill protection device all components of the flow restriction ball float vent valve must be removed as they can interfere with the proper operation of the new overfill protection device.
- (4) All data collected during these tests, as well as the final results, must be recorded on the DEM-provided form and submitted to DEM and the UST system owner/operator by the tester and/or the testing company within ~~fifteen-(15)~~ calendar days of completion of a passing test and seven-(7) calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will not be accepted and may be rendered invalid. The UST system owner/operator is required to maintain these test results as permanent records in accordance with § 1.13(B)(1)(a) of this Part.

- c. Within 30 days following any repair to overfill prevention equipment, the repaired overfill prevention equipment must be tested to ensure it is operating properly.

~~3Written verification of the installation of spill containment and overfill protection equipment must be submitted by the owner/operator to the Director within fifteen (15) calendar days of installation.~~

3. Sumps & Under-Dispenser Containment -

~~—All Piping collection, tank top, and transition sumps, submersible pump head containment structures, and under-dispenser dispenser containment pans/sumps, where existing, shall comply with the following requirements:~~

- a. ~~shall be~~ All sumps and under-dispenser containment shall be maintained such that all penetration fittings and entry boots are in good condition and free from cracking, dry rot, or other damage.
- b. ~~, a~~ All sensors are secured in an upright position and located no more than one inch above the lowest point of the sump. ~~at least one inch below the lowest penetration fitting or entry boot, and are kept clean and dry.~~
- c. Sumps and under dispenser containment shall be visually inspected at least annually and whenever an alarm or warning from a leak monitoring device indicates the presence of product, water, or other liquids.
- d. Single-walled sumps and under-dispenser containment that provide secondary containment and/or are used for interstitial monitoring of piping shall be tested for tightness prior to October 13th, 2020⁰¹ and a minimum of every three years thereafter using a method approved by the Director.
 - (1) If a sump or under-dispenser containment fails a tightness test, all associated tanks, piping, or dispensers which rely upon that component for secondary containment monitoring or spill prevention must be immediately taken out of service and temporarily closed. The impacted UST components shall not be allowed to return to service until the sump or under-dispenser containment has been replaced or repaired and satisfactorily passed an additional tightness test.
 - (2) DEM must be notified within 24 hours of any failed tightness test and a leak characterization report filed if required by —§ 1.14(G) of this Part.
 - (3) Any repairs to sumps or under-dispenser containment must be completed in accordance with the manufacturers approved methods and materials or using best available technologies and materials and require prior approval from DEM. All materials used must demonstrate long-term compatibility with sump, under-dispenser containment, and tank and product pipeline construction materials as well as rated for continuous use in the presence of gasoline, diesel, kerosene, ethanol, biodiesel, and all grades of heating fuel.
 - (4) Any repaired or replaced sumps and under-dispenser containment basins must be tested using an approved tightness testing method prior to being returned to service, and the facility owner must receive written permission from DEM prior to placing product into the UST system and returning to service.
 - (5) All data collected during these tests, as well as the final results, must be recorded on the DEM-provided form and submitted to

DEM and the UST system owner/operator by the tester and/or the testing company within ~~fifteen (15)~~ calendar days of completion of a passing test and seven ~~(7)~~ calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will not be accepted and may be rendered invalid. The UST system owner/operator is required to maintain these test

_____ results as permanent records, in accordance with _____ § 1.13(B)(1)(a) of this Part.

e. Double-walled sumps and under-dispenser containment that provide secondary containment and/or are used for interstitial monitoring of product pipeline must meet the following requirements:

- (1) Double-walled sumps and under-dispenser containment which have interstitial monitoring using a method approved by the Director must have the interstitial space inspected by the Class A/B operator prior to October 13th, 2020~~1~~ and monthly thereafter as part of the monthly UST facility walkthrough inspection.
- (2) Double-walled sumps and under-dispenser containment which do not have periodic interstitial monitoring completed at least every 30 days must undergo an interstitial space tightness test prior to October 13th, 2020~~1~~ performed by a qualified 3rd party using a method approved by the Director and every 3 years thereafter.
- (3) If the installed interstitial space monitoring device or additional testing indicates a failure of the interstitial space tightness, then the sump or under-dispenser containment, and all components which rely on it for spill prevention or leak detection, must be immediately taken out of service.
- (4) If the interstitial monitoring device or additional testing indicates failure of the secondary wall, but the primary wall remains liquid-tight, the sump or under-dispenser containment may be regulated as single-walled and is subject to the requirements of § 1.10(N)(3)(d) of this Part. -Double-walled sumps or under-dispenser containment without the ability the test the interstitial space for tightness shall be regulated as single-walled and are subject to the requirements of § 1.10(N)(3)(d) of this Part and are required to undergo tightness testing prior to October 13th, 2020~~1~~ and every ~~3~~three years thereafter. A variance from DEM is required prior to commencing operation under these conditions.

- (5) DEM must be notified within 24 hours of any failed sump or under-dispenser containment tightness test, and must approve all repairs and returning the repaired sump to service.
- (6) All data collected during these tests, as well as the final results, must be recorded on the DEM-provided form and submitted to DEM and the UST system owner/operator by the tester and/or the testing company within ~~fifteen (15)~~ calendar days of completion of a passing test and seven ~~(7)~~ calendar days for failed or inconclusive tests. This form must be completed in its entirety and results submitted on other forms or in other formats, or results missing information, will not be accepted and may be rendered invalid. The UST system owner/operator is required to maintain these test results as permanent records, in accordance with § 1.13(B)(1)(a) of this Part.

f. Installation of Under Dispenser Containment

- (1) Any modification to product piping, repairs or modifications to the shear/crash valve anchoring system, or the removal or replacement of the dispenser shall require the installation of liquid-tight under dispenser containment if not already present.
- (2) All dispensers at facilities requiring leak monitoring shall be required to have liquid-tight under dispenser containment prior to December 31st, 2024.
- (3) All under dispenser containment shall be tested for tightness in accordance with § 1.10(N)(3) of this Part.
- (4) Any UST system that is not equipped spill containment, under-dispenser containment, and overfill prevention equipment in accordance these Rules and Regulations shall be permanently closed in accordance with § 1.15 of this Part.

O. Submerged Fill Tube

1. — Except as provided in § 1.10(A) of this Part ~~Rule 8.04~~, all USTs are required to be equipped with a submerged fill tube.

P. Fill Pipe Labeling

1. — All fill pipes and/or fill box covers shall be permanently labeled or otherwise permanently marked, so that the product inside the tank is identified. Standards set forth in -"Using the API Color- Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and

Distribution Terminals, 3rd Edition, ~~above at~~incorporated above atin § 1.3(V) of this Part may be used to satisfy this requirement.

Q. Groundwater Monitoring Wells and UST Pad Observation Wells

1. All groundwater monitoring wells and tank pad observation wells that are finished at ground level must meet the following requirements:
 - a. Be equipped with a labeled and tamper-resistant cover. Labels shall identify them as being groundwater monitoring or observation wells.
 - b. Be fitted with a locking gripper cap or plug.
 - c. Cannot be screened to the top, in order to prevent surface water from infiltrating the wells.
 - d. ~~Be maintained so as to assure the prevention of pollutants from entering into the well.~~
 - e. Groundwater monitoring wells no longer used to gather information on geologic or groundwater properties shall be permanently abandoned in accordance with Appendix 1 of the RIDEM "Groundwater Quality Rules" Rules and Regulations for Groundwater Quality.

~~ater monitoring wells shall be bailed and evaluated for visual and olfactory evidence of free product no less than once per year and in accordance with Rule 9.18(C). Groundwater monitoring wells no longer used to gather information on geologic or groundwater properties shall be permanently abandoned in accordance with Appendix 1 of the RIDEM "Rules and Regulations for Groundwater Quality."~~

R. Recordkeeping

1. ~~Owners/operators of existing facilities shall maintain records documenting compliance with the provisions of § 1.10 of this Part of Rule 8 Minimum UST Operation and Maintenance Facility Requirements, in accordance with § 1.13 of this Part~~11 Maintaining Records.

S. Handling of Liquids Generated During Operation and Testing of UST Components

1. Any liquids generated from the operation of a UST or UST facility, including liquid removed from spill containment basins, piping sumps, or under dispenser containment, or liquid used during hydrostatic testing of these components, shall be disposed of properly and in accordance with applicable Federal, State, and local requirements.

T. Delivery Prohibition

1. The Director shall classify all USTs located at a facility as ineligible for delivery, deposit, or acceptance of petroleum-regulated substances or hazardous

materials, after providing written notice and within ~~(7)~~ seven days of determining that one or more underground storage tanks at the facility has one or more of the following violations:

- a. Failure to have the required spill prevention equipment installed, per § 1.10 of this Part. ~~Rule 8.16~~
 - b. Failure to have the required overfill protection equipment installed, per § 1.10 of this Part. ~~Rule 8.16~~
 - c. Failure to have the required leak detection equipment installed, per ~~Rules 8.08, 8.09, and 8.11~~; § 1.10 of this Part; or
 - d. Failure to have the required corrosion protection equipment installed, per § 1.10(E) of this Part. ~~Rule 8.05~~
 - e. Failure to maintain significant compliance with this Part or and-at the discretion of the Director to protect human health and the environment.
2. The Director may classify all USTs located at a facility as ineligible for delivery, deposit, or acceptance of ~~petroleum-regulated substances~~ or hazardous materials, if the owner/operator fails to complete corrective action and submit documentation within ~~sixty (60)~~ days following written notice from the Department of one or more of the following violations:
- a. Failure to properly operate and/or maintain leak detection equipment, perform tank or pipeline tightness testing, and/or compile inventory control records per §§ 1.10(F) through (I), ~~and 1.10(Q)~~ and 1.13(B) of this Part. ~~Rules 8.08, 8.09, 8.10, 8.11, 8.15, and 11.03;~~
 - b. Failure to properly operate and/or maintain spill prevention, overfill protection, or corrosion protection equipment per §§ 1.10(E) and ~~1.10(N)~~ of this Part. ~~Rules 8.06, 8.07, and 8.16;~~
 - c. Failure to maintain financial responsibility per §§ 1.8 and 1.9 of this Part. ~~Rule 7 and the Regulations promulgated under the "Rhode Island Underground Storage Tank Financial Responsibility Act", RIGL Chapter 46-12.9;~~
 - d. Failure to register or maintain registration including payment of all required fees; or
 - e. Failure to obtain or maintain required certification for Class A, Class B and/or Class C operator(s) per § 1.10(U) of this Part. ~~Rule 8.22.~~
3. Upon classification of a UST system as ineligible for delivery, deposit, or acceptance of ~~regulated substances~~ ~~petroleum~~ or hazardous materials, the Department shall determine and record the inventory of regulated substances

~~petroleum~~ or hazardous materials remaining in each of the USTs located at the facility and a red tag shall be affixed by the Department to the fill pipe(s) of all USTs located at the facility. -The tag or device must be:

- a. Located on the fill pipe of the UST;
 - b. Affixed in a manner that it is easily and immediately visible to the product deliverer; and
 - c. Affixed in manner that it cannot be removed and reattached without obvious visual evidence.
4. No owner, operator, product deliverer or other person shall deliver, deposit, or accept petroleum-regulated substances or hazardous materials into a UST which has a red tag affixed to the fill pipe.
 5. No owner, operator, product deliverer, or other person shall remove, deface, alter, or otherwise tamper with a red tag affixed to a UST fill pipe.
 6. A red tag shall remain affixed to a UST classified as ineligible for delivery, deposit, or acceptance of petroleum-regulated substances or hazardous materials until:
 - a. The UST is returned to compliance for the violations causing classification of the UST as ineligible for delivery, deposit, or acceptance of petroleum-regulated substances or hazardous materials;
 - b. The owner/operator submits notification to the Department that the violations causing the UST to be classified as ineligible for delivery, deposit, or acceptance of petroleum-regulated substances or hazardous materials have been corrected. Such notification shall be a written report detailing all actions that have been taken to return to UST to compliance and including verification such as test reports, invoices, receipts, inventory records, etc.; and
 - c. As soon as practicable, and within seven ~~(7)~~ days after notification of the corrections, the Department will perform a review sufficient to determine compliance and reclassify, or cause to be reclassified, the UST as eligible for delivery, deposit, or acceptance of petroleum-regulated substances or hazardous materials. For this Section, "reclassified" shall mean the physical removal of the "Red Tag" by the Department or an individual specifically authorized by the Director to remove such tags.
 7. USTs that are not brought into compliance including submission of all required notification and documentation to the Department within ~~thirty (30)~~ days after a red tag has been affixed, shall, be immediately placed into temporary closure in accordance with § 1.15(C) of this Part. ~~Rule 13.03.~~

8. USTs that are not brought into compliance including submission of all required notification and documentation to the Department within ~~one hundred and eighty (180)~~ days after a red tag has been affixed, shall be immediately permanently closed in accordance with § 1.15(D) of this Part. ~~Rules 13.05 and 13.11.~~
9. The Director may delay classifying a facility as ineligible for delivery, deposit or acceptance of ~~petroleum-regulated substances~~ or hazardous materials ~~for up to one hundred and eighty (180) days if the Department determines that prohibiting deliveries to the UST(s) would jeopardize health and safety or the availability of fuel to the community.~~

U. Operator Training and Certification Requirements

1. The designation of a Class A, Class B, or Class C operator does not limit or relieve the duties of the UST facility owner and/or operator to comply with the legal responsibilities under § 1.2 of this Part.
2. Effective August 1, 2012, all UST facilities shall have operators that are trained and certified according to the requirements of this Section. All UST facility owners/operators ~~ies~~ shall designate ~~have~~ three classes of operators to each of their UST facilities: Class A, Class B, and Class C.
 - ~~a.a.~~ Any facility that contains two or more UST systems operating independently and maintained by separate and distinct operators must have Class A, Class B, and Class C operators designated for each UST system.
3. A facility may have more than one individual designated for each class of operator. An individual certified as a Class A or Class B operator may be designated to ~~do so at~~ more than one UST ~~facility~~.
 - a. The same individual may serve as Class A, Class B, and Class C operator at a facility, provided the individual is trained and certified in each Class.
 - b. Prior to August 1, 2012, each facility owners/operators must complete and submit the DEM-provided~~Department's —certified operators— form~~form designating listing Class A and Class B operators to each facility, and shall immediately submit an updated form whenever ~~there is a change in~~ designated Class A and Class B operators. ~~—~~
 - c. After August 1, 2012, all new Class A and Class B operators shall be trained and certified within 30 days of assuming responsibility for a UST facility.
 - d. Class C operators must be trained prior to assuming the responsibilities of a Class C operator.

- e. All facility ~~owners/operators ies~~ must maintain, and revise when changes occur, a list of all its Class C operators assigned to the facility. The list shall include the latest date of training, and the name of the Class A or Class B operator that trained each Class C operator.
4. Owner(s)/operator(s) of UST facilities shall ensure that:
- a. A facility continuously has one or more individuals designated as Class A, Class B, and Class C operators who are certified according to this Section.
 - b. New or replacement Class A and Class B operators are certified and registered with the Department within 30 days of assuming the responsibilities of these classes.
 - c. No dispensing of substances regulated under this rule occurs at a UST facility without the presence of a Class A, Class B, or Class C operator.
5. The Class A operator is an individual who has the primary statutory and regulatory responsibility for maintenance and operation of the UST facility. This individual shall be trained to have an understanding of the statutory and regulatory requirements that relate to the permitting of the facility, including: financial responsibility; spill containment; overfill protection; release detection; corrosion protection; emergency response; product compatibility; notification requirements; release and suspected release reporting; temporary and permanent closure requirements; reporting and recordkeeping requirements; and operator training requirements. The Class A operator shall, at a minimum:
- a. Ensure proper operation and maintenance of the UST system.
 - b. Ensure proper recordkeeping.
 - c. Ensure records can be made available to the Department during inspections or upon request.
 - d. Ensure a proper response to emergencies caused by releases or spills from UST systems.
 - e. Make financial responsibility documents available upon request to the Department.
 - f. ~~Ensure all UST registration fees are paid to date.~~
- Ensure that the facility has ~~ss-a~~ a certified Class B operators registered with the Department.
- g. Ensure that the Class C operators are trained to respond to emergencies caused by releases or spills from the UST system.

- h. Notify the Department of changes to designated Class A and B operators at a UST facility and submit updated forms as necessary.
 - i. Be immediately available for consultation by telephone when the facility is operating.
 - j. Be on-site within 24 hours of a request to respond to the facility by emergency response personnel or the Department, or within a timeframe approved by the Department.
 - k. Conduct inspections of the UST facility at least once every 30 days and complete the Department monthly inspection checklist accordingly, if this responsibility has not already been fulfilled by the Class B operator.
 - l. Ensure proper UST system testing and inspections are completed in accordance with this Part.
6. The Class B operator is an individual who shall implement the day-to-day aspects of daily on-site operation and maintenance of a UST system(s). This individual shall be trained to have a practical and regulatory understanding of the components of a UST system and its proper operation, including: spill containment; overfill protection; release detection; corrosion protection; emergency response; and product compatibility. The Class B operator shall, at a minimum:
- a. Ensure that all applicable Sections of § 1.10 of this Part ~~Rule 8~~ are met including, but not limited to; spill containment, overfill protection, leak detection, ~~and inventory control~~, and corrosion protection.
 - b. Notify the Department of changes to designated Class A and Class B operators at a UST facility and submit updated forms as necessary.
 - c. Ensure that the Class C operators are trained to respond to emergencies caused by releases or spills from the UST system.
 - d. Maintain the list of trained Class C operators with training dates and names of the Class A and/or Class B operator who provided the training.
 - e. Be immediately available for consultation by telephone when the facility is operating.
 - f. Be on-site within four ~~(4)~~ hours of a request to respond to the facility by emergency response personnel or the Department, or within a timeframe approved by the Department.
 - g. Conduct inspections of the UST facility at least once every 30 days and complete the Department monthly inspection checklist accordingly, if this responsibility has not already been fulfilled by the Class A operator.

h. Ensure proper UST system testing and inspections are completed in accordance with this Part.

7. The Class C operator is an individual who is an employee and is, generally, the first line of response to events indicating emergency conditions. This individual shall be trained to recognize and respond to emergencies caused by releases or spills from the UST system, and be familiar with the facility layout and with reading alarm enunciator panels. Except as specified in § 1.10(U)(8) of this Part, a Class C operator shall:

- a. Be present at the facility during all operating hours.
- b. Control or monitor the dispensing or sale of regulated substances from the UST system.
- c. Properly respond to alarms or releases.
- d. Notify the Class A or Class B operator and appropriate emergency responders when there is a spill or other emergency.
- e. Be knowledgeable about and have access to the location of UST facility records.

8. Unmanned UST facilities are those that might not normally -that do not normally have Class C operators employees on-site (e.g., state/municipal unmanned fueling facilities)during operation (e.g., state/municipal fueling facilities).
Unmanned UST facilities shall:

- a. Have written approval to operate as an unmanned facility before operating without a Class C operator being present during all operating hours. Any request to operate as an unmanned facility must be submitted to the Department in writing.
- b. Have certified Class A and Class B operators designated to the facility and registered with the Department.
- c. Have a -have a sign posted that lists both the name and telephone number of the Class A operator, the Class B operator, the facility -owner/ or operator, 911, and local emergency responders. The sign must also include a statement whichs, and advises persons to call these numbers in the event of a spill or other emergency. This sign must be posted so that if an emergency occurs the person fueling the vehicle or filling the USTs can read it. A designated person(s) must be available to respond to emergencies immediately when the owner or operator is contacted.

~~Before operating without having a Class C operator present during all operating hours, these facilities must be approved by the Department in writing. These facilities must still have trained A, B and C operators. A designated person(s) must be available to respond to emergencies when the owner or operator is contacted.~~

9. Except for the requirement listed in § 1.10(U)(9)(d) of this Part, the Class A or Class B operator shall conduct an on-site inspection at least once a month and complete the Department's monthly inspection checklist form that will be provided by the Department. Results of these inspections shall remain on file at the facility for three years, and be made available at the time of a Department inspection.

- a. If the Class A or Class B operators notes that a facility is not in compliance during a monthly inspection, these observations must be fully documented on the Department monthly inspection checklist.
- b. The owner/operator of the facility must also provide their signature on that same Department monthly inspection checklist acknowledging the site deficiencies.
- c. -If the same non-compliance issues are observed during the walk-through inspections for three consecutive months at a facility, the Class A and Class B operator should notify the Department.
- d. The Class A or B operator of a UST facility in approved temporary closure per the requirements of § 1.15(C) of this Part must complete an on-site inspection of the facility once every six (6) months and complete the monthly inspection checklist provided by the Department.

10. Operator Training and Certification and Training Requirements

- a. Operator knowledge for all Class A and Class B operators must be demonstrated by the passing of an ~~ICC (International Code Council)~~ exam or other methods which test applicable knowledge approved by the Department. Certification as a result of passing this exam will be valid for five years from the date of passing provided the facility remains in compliance with these regulations.
- b. A copy of this certification must be submitted to the Department with the appropriate registration form for Class A and Class B operators.
- c. Class C operators must be trained every two years, by a Class A or B operator.

11. Reciprocity

~~Operator knowledge for all A and B operators must be demonstrated by the passing of an ICC (International Code Council) exam approved by the~~

~~Department. Certification as a result of passing this exam will be good for five years provided the facility remains in compliance with these regulations. A copy of this certification must be submitted to the Department to remain in compliance.~~

a. Passing any other New England State approved exam administered by ICC will be an acceptable means of demonstrating knowledge and a certificate of passing must be submitted to the Department. A certificate of passing of any other New England ICC exam will be good for five years provided the facility remains in compliance with these regulations. After five years, that Class A and/or Class B operator must pass the Rhode Island ICC exam and submit a copy of that certification to the Department.

- b. If a new operator in RI has demonstrated knowledge from passing an exam approved by another state (not administered by ICC), that certificate is allowed as an acceptable means of demonstrating knowledge. A copy of the certification must be submitted to the Department for a period of one year from the date of form submittals to the Department, provided the facility remains in compliance with these regulations. ~~A copy of the certification must be submitted to the Department.~~ After one year, ~~that~~ Class A and/or Class B operator must pass the Rhode Island ICC administered exam approved by the Department and submit a copy of that certification to the Department. A facility owner/operator may not designate Class A and/or Class B operators with other-state certifications in consecutive years without Department approval.

12. ~~Class C operators must be trained every two years, by a Class A or B operator (or a Class A or B operator trained in accordance with (G)(1), (2) or (3) above may be designated as a Class C operator for the time period(c) specified in (G)(1), (2) or (3) above).~~

~~Retraining and Re-Certification~~ If a facility is not in compliance with these regulations at the time of a Department or EPA conducted UST compliance inspection then the Class A and/or Class B operators shall be required to be retrained and re-certified as specified below:

- a. Class A operators shall be retrained and re-certified if any facility for which they provide oversight is determined by the Department to be significantly out of compliance with the requirements of these regulations for which a Class A operator is responsible as provided in § 1.10(U)(5) of this Part. ~~Rule 8.22(B).~~
- b. Class B operators shall be retrained and re-certified if any facility for which they provide oversight is determined by the Department to be significantly out of compliance with requirements of these regulations for which a Class B operator is responsible as provided in § 1.10(U)(6) of this Part. ~~Rule 8.22(C).~~

- c. Class A and Class B operators that require retraining shall be retrained and recertified within 360 days of the date of the Department's letter of non-compliance. The Class A and/or Class B operator, and shall submit a copy of the recertification to the Department immediately.

1.11 New and Replacement ~~Tank~~ UST System Requirements

A. Applicability

1. This Section shall apply to all new or replacement USTs and product piping under these regulations with the exception of those tank systems to be used to store heating oil consumed on-site solely for heating purposes, which are exempt from §§ 1.11(F), ~~1.11(G)~~, ~~1.11(N)~~, ~~1.11(O)~~, and ~~1.11(P)~~ of this Part.

B. Prohibitions

1. The installation of new USTs wherein the groundwater is designated as a wellhead protection area for a community water system, pursuant to R.I. Gen. Laws Chapter 46-13.1, is prohibited. However, USTs that have been registered prior to the effective date of these regulations and have not been abandoned or removed from the ground for more than 180 days shall be permitted to be replaced with a tank(s) of equivalent size or less, and substance stored, and in accordance with the provisions of these regulations.
2. In accordance with the RI DOH "Rules and Regulations Pertaining to Public Drinking Water" ~~“(R46-13-DWQ)”~~, the installation of a UST within 200 feet of a public dug well or bedrock drilled (rock), driven, or dug well or within 400 feet of a gravel-packed or gravel-developed well is prohibited.
3. USTs are to be installed as far away as possible from private wells, ~~“per the RI DEM “Rules and Regulations Governing the Enforcement of Chapter 46-13.2 Relating to the Drilling of Drinking Water Wells.”~~
4. The installation of bare steel or metal USTs and product piping without corrosion protection is prohibited. ~~for storage of petroleum products or hazardous materials is prohibited.~~
5. No person shall commence construction of a new tank system or replacement tank system, and no modification (including product piping replacement) may be made to any UST facility for which an application for a certificate of registration is required, without prior written notification to and approval by the Director.

C. General Requirements:

1. Prior to the installation or replacement of any USTs or product piping, Before commencing construction of a new UST system, replacement UST system, or modification to an existing UST system (including product piping replacement), the owner/~~operator~~ is required to submit at minimum the following:

- a. A completed Underground Storage Tank Registration Form;
 - b. A completed Equipment List Addendum;
 - c. A completed UST Installation/Modification/Upgrade Supplemental Information form;
 - d. A site plan including all of the information listed in § 1.7(D)(1)(a) ~~((3))~~ of this Part that has been reviewed and stamped by a registered Professional Engineer; (plans for new UST systems must be stamped by a registered Professional Engineer);
 - e. Specifications or a diagram indicating depth of excavation, bedding, and backfill, supports and anchorage used, distance between tanks, and dimensions (including thickness) of traffic pad.
 - f. The appropriate registration fees in accordance with §§ 1.7(I) and ~~1.7~~(J) of this Part.
2. The granting of a ~~Letters~~ letter of approval from the Director authorizing the installation of new/replacement UST systems or modification of an existing UST system are valid for a period of one (1) year from the date of issuance. Approvals may be extended by the Director upon written request by the owner/operator does not exempt the owner/operator from the obligation to obtain any necessary permits from other Federal, state, or local agencies.
 3. Letters of approval are valid for a period of one ~~(1)~~ year from the date of issuance. Approvals may be extended by the Director upon written request by the owner/operator.
 4. In accordance with § 1.12(D)(1)(d) of this Part, an on-site environmental consultant shall be present for all modifications involving the excavation of soils.
 5. All USTs shall be maintained and operated in compliance with § 1.10 of this Part. ~~all national codes of practice for handling and storing of petroleum or hazardous materials as listed in Appendix B.~~
 6. All USTs equipped with cathodic protection shall be maintained and operated in accordance with the requirements outlined in § 1.10(E) of this Part. ~~Rule 8.07 of these Regulations.~~
 7. All secondary containment systems shall be designed, constructed and installed to:
 - a. Contain regulated substances released from the tank system until they are detected and removed,

- b. Prevent the release of regulated substances to the environment at any time during the operational life of the underground storage tank system, and
- c. Be checked for evidence of a release at least every 30 days.

D. Compatibility

1. All new or replacement tank and/or piping systems shall be made of ~~or lined with~~ materials that are compatible with the substance(s) stored. The owner/operator shall not introduce, or allow to be introduced, any material into a UST system that is incompatible with the UST system. The owner/operator must demonstrate that the contents of the UST system is compatible when greater than 10% ethanol or 20% biodiesel is being stored by submitting written documentation in accordance with § 1.10(B)(4)(b) of this Part.

E. ~~Tanks~~—Design and Manufacturing Standards

1. All new USTs installed in Rhode Island shall provide for secondary containment of the tank and associated piping and shall be constructed in accordance with applicable one of the national codes of practice, including but not limited to: "Standard for Underground Steel Tanks", incorporated above at § 1.3(GG) of this Part; "Standard for Nonmetallic Piping For Flammable Liquids", incorporated above at § 1.3(J) of this Part; "Standard for Metallic Underground Fuel Pipe" incorporated above at § 1.3(K) of this Part; "Standard for Glass-Fiber Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures", incorporated above at § 1.3(L) of this Part; and "Standard for Underground Reinforced Plastic Tanks", incorporated above at § 1.3(FF) of this Part; ~~Appendix B~~, and the requirements listed below:
 - a. All new and replacement USTs shall be of double-walled construction.
 - ~~b. All USTs constructed of fiberglass-reinforced plastic shall comply with one of the following national codes, as amended:~~
 - ~~(1) "Standard for Glass-Fiber Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures",~~
 - ~~(2) "Standard for Underground Reinforced Plastic Tanks"~~
 - b. All USTs constructed of steel shall be cathodically protected and shall comply with one of the following national codes, ~~as amended~~:
 - (1) "Standard for Underground Steel Tanks" incorporated in § 1.3(II) of this Part, 1992: "External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids" ~~Standard for Galvanic Corrosion Protection Systems for~~

~~Underground Steel Tanks,~~” incorporated above atin § 1.3(HH) of this Part, and ~~1984(R1998): "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems"~~ incorporated above atin § 1.3(II) of this Part.

- (2) ~~"External~~ Corrosion Control of Underground Storage Tank Systems by Cathodic Protection” incorporated above atin § 1.3(P) of this Part and ~~December 13, 1996: "Standard for Steel Underground Tanks for Flammable and Combustible Liquids."~~ incorporated above atin § 1.3(I) of this Part.
- (3) ~~sti-P3, February 2010:~~”STI-P3 Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks” incorporated above atin § 1.3(E) of this Part and ~~"Standard for Steel Underground Tanks for Flammable and Combustible Liquids"~~ incorporated above atin § 1.3(I) of this Part. ~~Underwriters Laboratories Standard 58, December 13, 1996: "Standards for Steel Underground Storage Tanks for Flammable and Combustible Liquids."~~

c. Steel-fiberglass reinforced plastic composite UST systems, steel-high density polyethylene (HDPE) UST systems, and steel-polyurethane UST systems shall comply with the “Standard for External Corrosion Protection Systems for Steel Underground Tanks,” incorporated above atin § 1.3(M) of this Part, ~~"Standard for Steel Underground Tanks for Flammable and Combustible Liquids"~~ incorporated above atin § 1.3(I) of this Part, ~~as amended, Underwriters Laboratories Standard 58, December 13, 1996: "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," as amended,~~ and one of the following codes:

- (1) ~~, February 2010:~~ “ACT-100 Specification for External Corrosion Protection of FRP Composite Steel USTs” incorporated above atin § 1.3(F) of this Part, ~~as amended,~~
- (2) ~~, February 2010:~~ “Specification for Permatank” incorporated above atin § 1.3(H) of this Part, ~~as amended,~~ or
- (3) ~~, February 2010:~~ “ACT-100-U Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks,” incorporated above atin § 1.3(G) of this Part. ~~as amended.~~

F. Wear Plates

1. _____ All new and replacement USTs shall have steel wear plates, on the inside bottom of the tanks, centered under all openings with minimum dimensions of at least 9 inches wide and at least one square foot in area and at least 1/4" thick.

G. Submerged Fill Tube

1. _____ All new and replacement USTs shall have a submerged fill tube.

H. Fill Pipe Labeling

1. _____ All fill pipes and/or fill box covers shall be permanently labeled, or otherwise permanently marked, so that the product inside the tank is identified. Standards set forth in -"Using the API Color- Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals, 3rd Edition" incorporated above atin § 1.3(V) of this Part may be used to satisfy this requirement. -The American Petroleum Institute Publication 1637, 2007 may be used to satisfy this requirement

Manufacturer's Test

~~Prior to installation, all new and replacement USTs shall be factory tested and guaranteed tight by the manufacturer. This guarantee shall be filed with the Director at the time of installation.~~

I. Installation Standard

1. All tanks, piping, and other related facility components shall be installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory, including but not limited to "Installation of Underground Petroleum Storage Systems" incorporated above atin § 1.3(A) of this Part; "Standard for the Installation of Oil Burning Equipment", incorporated above atin § 1.3(B) of this Part; "Recommended Practices for Installation of Underground Liquid Storage Systems", incorporated above atin § 1.3(C) of this Part, and "Recommended Practices for the Installation of Marina Fueling Equipment", incorporated above atin § 1.3(D) of this Part; and "Installation of Underground Hazardous Substances or Petroleum Storage Systems", incorporated above atin § 1.3(E) of this Part, -as listed in Appendix B and in accordance with the manufacturer's instructions.
2. Installers ~~The installer~~ shall be ~~certified or~~ licensed as ~~may be~~ required by the RI Department of Labor, Division of Professional Regulation and certified by the UST, piping, or component manufacturer or representative trade group- (See R.I. Gen. Laws Chapter§ 28-27 regarding the installation of commercial gasoline, diesel fuel, and heating oil UST systems.)
3. The local city/town building official shall be notified prior to the commencement of installation.

J. Tightness Testing Upon Installation:

1. All new and replacement tanks and piping (primary and secondary) shall be tightness tested after all paving over the tanks and piping has been completed and before commencing regular UST operation. In accordance with § 1.10(H)(2) of this Part, the results of this initial tightness test shall be submitted to the

Director within 15 calendar days of test completion or, in the event of a leak, in accordance with § 1.14 of this Part.

2. Tightness tests must be capable of detecting a 0.1 gallon per hour leak rate from the entire tank system, accounting for the effects of thermal expansion or contraction of product, vapor pockets, tank deformation, evaporation, condensation, and the location of the water table. The probability of detection shall be no less than 95% ~~percent~~ and the probability of a false alarm shall be no more than 5% ~~percent~~.
3. All persons who conduct tightness tests and all test methods used must be licensed in accordance with § 1.16 of this Part.

K. Piping – Design, Construction and Installation:

1. All new or replacement piping that is part of an underground storage tank system and routinely contains regulated substances, including fittings, ~~and~~ connections, and remote fill piping, shall be designed and constructed in accordance with the following:
 - a. Fiberglass reinforced plastic piping and nonmetallic flexible piping shall be made of materials listed by Underwriters Laboratories (~~UL~~) and be equipped with secondary containment.
 - b. All steel or metal piping which routinely contains a regulated substance, including remote fill piping, shall be equipped with secondary containment, and all such piping that is in contact with the ground shall be cathodically protected with an impressed current system. All cathodic protection systems shall be designed, installed, operated and maintained in accordance with the national codes of practice cited in § 1.11(E)(2) of this Part.
 - c. The use of copper piping is restricted to No. 2 heating oil and to diesel fuel serving generators and must employ secondary containment. In all cases this piping shall be protected from damage.
 - d. Secondary containment piping is required to be listed by UL or ULC as an underground secondary pipe for flammable liquids, with the exception that heating oil USTs used solely for on-site consumption may be allowed to use PVC piping for secondary containment (minimum schedule 40 thickness).
2. Aboveground sections of all UST product piping systems also must be equipped with secondary containment, with the exception of aboveground indoor piping.
3. All UST primary and secondary product piping, before being covered, enclosed, or placed in use, shall be hydrostatically or pneumatically tested in accordance with the "Flammable and Combustible Liquids Code" incorporated above at ~~in~~ §

1.3(W) of this Part, Rule 3-8, and the "Installation of Underground Petroleum Storage Systems" API Publication 1615, Rule 10.2 incorporated above at § 1.3(A) of this Part.

4. Siphon (manifold) piping systems are required to meet the design and construction standards given in §§ 1.11(K)(1) and 1.11(M)(1) of this Part.
5. Remote fill piping must meet the design and construction standards given in §§ 1.11(K)(1), and §§ 1.11(M)(1) and (M)(6) of this Part.
6. All underground portions of vent piping shall be made of either fiberglass reinforced plastic listed by UL or cathodically protected and coated steel, and shall be installed in accordance with RI DEM Office of Air Resources Air Pollution Control Regulation No. 11, "Petroleum Liquids Marketing and Storage." For USTs storing fuel oil and/or diesel generator fuel only, the use of metallic vent piping is allowed provided that the piping is protected against corrosion.

L. Spill and Overfill Prevention Equipment - — All new and replacement UST systems shall be provided with equipment and procedures to prevent spilling and overfilling during product transfers to the tank in accordance with the following:

1. Spill prevention equipment that will prevent a release of regulated substance to the environment in the area of the fill pipe. A spill containment basin used to satisfy this requirement must have the following meet the following specifications:
 - a. The basin must be capable of holding a minimum of three3 gallons;
 - b. The basin must be surrounded by an impervious surface and;
 - c. If the basin is made of metal, then its exterior wall must be protected from galvanic corrosion.
 - d. The basin cover must be labeled or marked in accordance with — § 1.10(P) of this Part.
 - e. All new and replacement spill containment basins shall be double-walled and capable of periodic interstitial monitoring. Single-walled spill containment basins are prohibited from being installed as of the effective date of these regulations.
 - f. Newly installed basins and sumps must be tested for tightness upon installation.
2. USTs storing heating oil consumed on-site solely for heating purposes with above-ground fill pipes do not require spill containment basins, provided that:
 - a. The ground surrounding the fill pipe is covered with a positive-limiting barrier constructed of a material that is impervious to the substance stored and is properly graded to can contain spills of < three3 gallons.

~~(Example: concrete and asphalt are acceptable, while dirt and grass are not.)~~

- b. The fill pipe extends a minimum of six6 inches above the finished grade;
 - c. Above-ground fill pipes located in areas subject to traffic or vehicular damage shall be protected by concrete-filled bollards with a minimum diameter of two inches, and at least three feet high, three feet below grade, and spaced no more than four feet apart.
3. Overfill prevention equipment designed to restrict or stop the flow of fuel during a delivery before the tank reaches full capacity as follows:
- a. Alert the transfer operator when the tank is no more than ~~90% percent~~ full by restricting the flow into the tank or triggering a remote high-level alarm; or
 - b. Automatically shut off flow into the tank when the tank is no more than 95% percent full; or
 - c. ~~Restrict flow 30 minutes prior to overfilling, a~~Alert the operator by means of a high level alarm one minute before overfilling, or shut off flow into the tanks so that none of the fittings located on the top of the tank are exposed to product due to overfilling; or
 - d. An equivalent device pre-approved by the Director.
 - e. ~~Use of a flow restriction ball float vent valve is restricted to submerged pumping systems (not suction pump systems) and gravity deliveries (not pump off unloading). Ball float vent valves must be installed so as to allow annual inspection for proper operation. Check with the tank manufacturer to see if a ball float vent valve is prohibited.~~The use of flow restrictors in vent lines is no longer allowed as an option to meet the overfill prevention equipment requirement for newly installed UST systems and when flow restrictors in vent lines are replaced. USTs used to store fuel oils consumed on-site solely for heating purposes, and emergency generator USTs, are allowed to be equipped with an in-line vent whistle as a method of overfill prevention. Vent whistles may be used only when tight fill, pump-off deliveries are made. The vent opening must be located adjacent to the fill (within eight feet, or if not practical then as close as possible to be readily heard by the deliverer). The vent whistle must be installed so as to alarm (stop whistling) when the tank is 90% full. Vent whistles also must be installed so as to allow annual inspection for proper operation.
 - f. USTs that never receive more than 25 gallons at one time (e.g., waste oil USTs) are not required to have overfill protection.

M. Tank Top Sumps, Transition Sumps, and Dispenser Sumps:

1. All new and replacement USTs shall be equipped with a liquid-tight tank top containment sump for the purpose of providing a low-point collection area for secondary piping, siphon piping, and remote fill piping and access for periodic maintenance. All sumps shall be installed using gaskets, sealants, and fittings that are compatible with the substance stored.
2. All new and replacement secondary piping systems shall terminate in a tank top sump or transition sump as described in § 1.11(M)(1) of this Part.
3. All flexible underground piping runs shall be continuous whereby all connections for both the primary and secondary piping are made in accessible sumps as described in § 1.11(M)(1) of this Part.
4. Facilities at which new or replacement piping for motor fuels is being installed are required to install under-dispenser containment at every dispenser connected to the UST system and/or containment sumps if not already present. ~~are required to have liquid-tight containment pans or sumps under each fueling dispenser.~~
5. Facilities at which new or replacement motor fuel dispensers and the equipment necessary to connect the dispenser to the UST system are being installed are required to install under-dispenser containment at every dispenser connected to the UST system if not already present. ~~have liquid-tight containment pans or sumps under each fueling dispenser.~~ The equipment necessary to connect the dispenser to the UST system may include check valves, shear valves, swing joints, flexible connectors, or other transitional components that are beneath the dispenser and connect the dispenser to the underground piping. Such containment must allow for visual inspection and access to the components in the containment system and/or be monitored.
6. All sumps described in §§ 1.11(M)(1) through (M)(3) of this Part shall be continuously monitored in accordance with § 1.11(O)(4) of this Part. In addition, "loop" piping systems shall be continuously monitored at each fueling dispenser or be equipped with "jumpers" connecting the secondary containment piping and making a continuous loop back to the tank top sump. Fueling dispensers that are low-point (at a lower elevation than the tank top) also shall be continuously monitored as described above.
7. All newly installed or replacement sumps and under dispenser containment shall be tested for liquid tightness upon installation in order to determine that all joints, seals, and couplings are watertight.

N. Leak Detection for New and Replacement Underground Storage Tanks:

1. A continuous monitoring system ~~system~~ ~~Leak monitoring~~ shall be installed and continuously operated for all new USTs.

2. The interstitial space in all double-walled USTs shall be continuously monitored for the presence of both the regulated substance and water. A discriminating sensor for the regulated substance and water is not required. Double-walled USTs with a brine solution or other inert liquid in the interstitial space shall be continuously monitored for a change in fluid level in the reservoir and interstice.

~~3. Continuous monitoring systems must be designed, constructed, and installed so as to detect a 0.2 gallon per hour leak rate from any portion of tank system that routinely contains product. The probability of detection shall be no less than 95 percent and the probability of a false alarm shall be no more than 5 percent.~~

O. Leak Detection for New and Replacement Underground Piping Systems:

1. All new and replacement pressurized piping systems shall employ a UL-approved line leak detector capable of detecting a line leakage rate of 3three gallons per hour at 10 pounds per square inch of line pressure. If a leak is detected, said leak detection system shall shut-off or restrict product flow and otherwise notify the operator of the detection of a leak.
2. All new or replacement suction piping systems shall be equipped with a check valve located directly below and as close as practical to the inlet of the suction pump.
3. The interstitial space of double-walled piping or the annular space between the primary piping and secondary containment system shall be continuously monitored to detect water ~~, and the presence of the regulated substance, and its vapors if the substance is a volatile organic compound or mixture with a vapor pressure greater than gasoline.~~ A leak sensor employed as described in § 1.11(O)(4) of this Part shall also satisfy this requirement.
4. All piping collection sumps, transition sumps, and submersible pump head containment structures shall employ a leak monitor (sensor) activated by water and, the regulated substance ~~substance or its vapors~~ and secured at a maximum of least 1" above the lowest point in the sump. ~~below the lowest penetration fitting or entry boot.~~
5. All secondary piping ~~test boots~~ shall ~~be disconnected so as to~~ allow for any leakage in the piping to flow into the sump area unobstructed.
6. All dispensers of motor fuels under pressure from a remote pumping system shall be equipped with an emergency shut-off valve (e.g., "shear" or "crash" valve) on each pressurized line which enters a dispenser. which is located in the supply line at the inlet of the dispenser. Each valve must be securely anchored below grade and below the shear point of the valve. -This valve shall be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe.

7. Dispensers which are "low point" (at a lower elevation than the tank top or sump) shall be continuously monitored as described in § 1.11(O)(4) of this Part.
8. Dispensers used in "loop" piping systems shall be continuously monitored as described in § 1.11(O)(4) of this Part or be equipped with "jumpers" connecting the secondary containment piping and making a continuous loop back to the tank top sump.
9. Anti-Siphon Valves: Where a tank is located at an elevation that produces a gravity head on the dispensing unit (or pump outlet, for heating oil USTs), the tank outlet shall be equipped with a device~~(such as a solenoid valve)~~ that will prevent gravity flow from the tank to the dispenser/pump. This device shall be positioned, installed, and adjusted so that liquid cannot flow by gravity from the tank to the dispenser/pump, in the event of failure of the piping or hose when the system is not in use.

P. Operation of Leak Monitoring Equipment

1. Leak monitoring devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running conditions. All leak monitoring devices shall be inspected, calibrated, and tested upon installation and thereafter to insure proper operation. Such testing shall be performed by trained, qualified persons. All records pertaining to the equipment manufacturer, warranties, maintenance requirements, repairs, maintenance, and testing shall be maintained on-site for the life of the system or at an alternate location approved by the Director in writing.
2. Leak monitoring devices shall not be shut off or deactivated at any time except for repair. Any malfunction shall be repaired within ~~fifteen (15)~~ working days of its first occurrence. If the device(s) cannot be repaired within 15 days, the affected UST system(s) shall be temporarily closed in accordance with § 1.15(C) of this Part until satisfactory repairs are made. Any deactivation of a monitoring device shall be immediately reported to the Ddepartment by the owner/operator.
3. Leak monitoring devices shall employ an audible alarm and a visual indicator, which shall be so located as to be readily heard and seen by the owner/operator or other personnel during normal working hours.
4. All monitoring devices shall be conspicuously marked or labeled as being monitoring devices and shall be secured against vandalism, incidental damage and improper deactivation.
5. All continuous monitoring systems shall be tested by the owner/operator on a monthly basis to ensure that they are operating effectively. Records of such tests shall be maintained in accordance with ~~§§ 1.11(P)(1) of this Part~~ and ~~§-1.13~~ of this Part.

6. All leak-monitoring devices shall be inspected, calibrated and tested annually to ensure proper operation. Testing must be performed by trained, qualified persons. Records of such tests shall be maintained in accordance with §§ 1.10(M)(9) ~~of this Part~~ and § 1.13(B)(1)(a) of this Part.

Q. Monitoring Wells and UST Pad Observation Wells

- 1. As a condition of approval for new or replacement UST systems located in environmentally sensitive areas, the Director may require the installation of one or more groundwater monitoring wells ~~meeting the following specifications:~~ The well or wells shall be located so as to be likely to detect any release from the UST systems. The location of the well and/or the requirement of additional wells are subject to the approval of the Director.
2. Monitoring wells and tank pad observations wells, if installed, shall be constructed and maintained in accordance with Appendix 1 of the RIDEM "Groundwater Quality Rules~~Rules and Regulations for Groundwater Quality~~" and § 1.10(Q) of this Part.

~~and as described below:~~

- ~~a. The screen portion of the wells shall extend a minimum of five (5) feet below the average dry season water table elevation at the site. The screen shall be open to the water table at all times. Wells cannot be screened to the surface.~~
- ~~b. The screen shall be of sufficient length to compensate for seasonal fluctuations in the water table.~~
- ~~c. All wells shall have a minimum inside diameter of two (2) inches and be constructed using a minimum of schedule 40 PVC piping.~~
- ~~d. All wells shall have bottom caps.~~
- ~~e. All wells shall be gravel packed around the screen and grouted to the surface.~~
- ~~f. All wells with casing extending aboveground shall have a mounded surface seal around the well casing and a locked, above grade protective security cover.~~
- ~~g. All wells that are finished at ground level shall have a roadbox, tamper resistant identifying cover and locking gripper (cap) in order to prevent surface runoff from entering the well.~~
- ~~h. Monitoring wells are required to be properly developed no earlier than 48 hours after completion and before initial water quality samples are taken.~~
- ~~i. The requirement to complete monitoring wells may be waived by the Director if groundwater is not encountered within 30 feet of the ground surface.~~

~~Monitoring well check: Where groundwater monitoring wells are installed, the water in the monitoring well shall be bailed and evaluated, noting any visual or olfactory evidence of free product, no less than once per year. Written records of all well check observations shall be kept in accordance with the permanent record-keeping requirements in Rule 11.02(A). All owners/operators must promptly investigate and report any evidence of free product in accordance with Rule 12 Leak and Spill Response.~~

3. ~~Access to wells~~

Upon request, the owner/operator shall provide access to the monitoring wells to the Director.

1.12 Facility Modifications or Repairs

A. Prohibition

1. ~~_____~~ No modification may be made to any UST facility for which an application for a certificate of registration is required, without prior written notification to and approval by the Director.

B. Modification Standard

1. ~~_____~~ Any modification to or replacement of facility components shall be made to conform to the requirements of § 1.11 of this Part. ~~Rule 9 New and Replacement Tank System Requirements.~~

C. Reuse of Tanks

1. Used USTs meeting the specifications given in § 1.11 of this Part, may only be installed after:
 - a. The owner/~~operator~~ makes a written request for and receives written approval from the Director of the proposed modification;
 - b. Documentation is provided that the used tanks have been inspected and tested by the manufacturer and found satisfactory;
 - c. Documentation is provided that the used tank has been certified by the manufacturer to be reusable for the product to be stored; and
 - d. Documentation is provided that the used tank is given the balance of the original warranty by the manufacturer.

D. Approval of Modifications or Repairs

1. USTs and/or their associated piping can be modified or repaired only once, provided that:

- a. The Director has approved the modification or repair;
- b. Any modification or repair which requires excavation of soil or removal, replacement, reconfiguration, or disturbance of any subsurface UST component must receive prior written permission from the Director.
- c. The modification or repair is properly conducted in accordance with applicable national codes of practice and the manufacturer's specifications;
- d. An environmental consultant is present for any modification or repair (including piping installation or replacement) that requires the excavation of soils. The environmental consultant shall ~~screen soils for the presence of contamination and submit a written summary of the findings to DEM within 30 days. Releases shall be reported in accordance with Rule 12 Leak and Spill Response.~~ submit a report within 30 days summarizing the work performed and including the following:
 - (1) Results of screening soils (including method used);
 - (2) Observations of contamination (including odors from the excavation and discoloration in the concrete or peastone or soil);
 - (3) A site diagram;
 - (4) A test pit log.
 - (5) Conclusions or recommendations.
- e. Releases shall be reported in accordance with § 1.14 of this Part.
- f. The tank and/or piping system (primary and secondary) passes a tightness test conducted within 30 days of the completed modification or repair, ~~and~~ prior to commencing UST operation, and in accordance with § 1.10(H) of this Part. Results of the tightness test must be submitted to the Director within fifteen (15) calendar days of test completion, or immediately in the event of a leak, in accordance with § 1.14 of this Part;
- g. The method of modification or repair is compatible with the product or material to be stored;
- h. All damaged tank system components, including but not limited to pipe sections and fittings, must be replaced immediately.

1.13 Maintaining Records

- A. Applicability

1. _____ All owners/operators of UST facilities shall maintain records in accordance with the following rule except that the provisions of §§ 1.13(B)(1)(a)((4)) and ((9)) and § 1.13(B)(1)(b) of this Part shall not apply to tanks used for storing fuel oils of any grade that is consumed on-site solely for heating purposes.

B. Records

1. All owners/operators of UST facilities shall maintain on the facility premises or at an alternate location approved by the Director, for the period of time specified below, records of the following:

a. Permanent Records - The following shall be maintained for three years beyond the operational life of the facility:

- (1) All data used to complete the application for the certificate of registration;
- (2) All records of modifications or repairs to pipes, fittings or other components of underground storage tank systems;
- (3) All records of the storage of regulated substances greater than 10% ethanol and/or 20% biodiesel in underground storage tank systems, and records demonstrating the compatibility of a system to hold such substances;
- (4) Annual test results of equipment or systems used for leak detection and inventory control;

~~Results of monitoring well checks as referenced in §101.8 (S) (4) of this Part and § 1.10 (R) (3) of this Part;~~
- (5) Records of closure activities;
- (6) Records of leaks, spills, releases, overfills, site investigations, and remedial response activities taken;
- (7) Tank and/or line tightness test results including all of the information required in § 1.10(H) of this Part; Rule 8.10;
- (8) All records pertaining to the operation and maintenance of approved corrosion protection methods as required in _____ § 1.10(E) of this Part;
- (9) Equipment warranties and manufacturers' checklists.
- (10) All records pertaining to the monitoring and inspection of double-walled spill prevention equipment, containment sumps, and overflow prevention equipment.

- (11) All records pertaining to the testing and/or inspection of single-wall spill prevention equipment, containment sumps, and overfill prevention equipment.

b. Routine Recordskeeping

- The following records shall be maintained for a minimum period of three years from the date made, or for such longer periods as required by the Director in the resolution of enforcement actions:

- (1) Records of all calibration and standard maintenance performed;
- (2) Records of strip charts, electronic recall device and/or manual recordings for any continuous monitoring instrumentation;
- (3) Records of monthly tests of continuous monitoring systems as required in §§ 1.10(M)(5), Rules 8.15 (E) and § 1.11(P)(5) of this Part.
- (4) Records of operator's monthly inspection checklists.
- (5) Daily and monthly inventory record keeping, as described in § 1.13(C) of this Part.
- (6) Records of annual shear valve tests.

C. Inventory Control, Recordkeeping and Leak Reporting

1. All product inventory shall be managed in accordance with the following:

- a. Inventory volume for regulated substance inputs (fuel deliveries), withdrawals (amount dispensed), and the amount still remaining in the tank shall be measured and recorded each operating day;
- b. Any unusual occurrences that might affect the inflow, outflow, or volume on hand, shall be recorded each operating day, along with any adjustments that were made to the records.
- c. All inventory gauging equipment shall be capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth of an inch;

~~All inputs of regulated substance shall be reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;~~

- d. All deliveries shall be made through a drop tube that extends to within six ~~(6)~~ inches of the tank bottom;

- e. Product dispensing shall be metered and recorded within the local standards for meter calibration or an accuracy of six ~~(6)~~ cubic inches for every five ~~(5)~~ gallons of product withdrawn, whichever is more accurate;
- f. All tanks shall be gauged for the presence of water in the bottom of the tank at least once each month and a measurement of any water present shall be recorded to the nearest one-eighth of an inch. If the water measurement exceeds one⁴ inch, then the water is required to be removed;
- g. Inventory records for single wall tanks shall include a leak check to reconcile differences in the daily measurement of inflows, outflows, and volume on hand. If the leak check indicates a discrepancy of 1% or more of the flow-through plus 130 gallons on a monthly basis, then the owner/operator shall report such discrepancy in accordance with § 1.14 of this Part. Inventory reconciliation is not required to be performed on double or triple walled tanks.

D. Access to Records

- 1. _____ The owner/operator shall make available to the Director, upon request, all records which the Director determines may be pertinent to the enforcement of this Part. ~~Change of Ownership: In the event of a change of ownership, records pertaining to the facility shall be transferred in accordance with Rule 16 Transfer of Certificates of Registration or Closure.~~

1.14 Leak and Spill Response

A. Applicability

- 1. _____ These regulations shall apply to all new, existing, and abandoned tank facilities at which ~~petroleum-regulated substances products~~ and/or hazardous materials are stored underground as specified in §§ 1.4 and 1.5 of this Part.

B. General Requirements

- 1. _____ All owners/operators of underground storage tank systems storing ~~petroleum-regulated substances products~~ or hazardous materials must report, investigate, and clean up any overfills, spills, leaks, or releases in accordance with this Part Regulation and any other applicable provisions of local, state and federal statutes, Rules and Regulations.

C. Investigation of Suspected Releases

- 1. All owners/operators must promptly investigate all suspected overfills, spills, leaks or releases, including, but not limited to, instances where:

- a. Unusual operating conditions, release detection signals or environmental conditions at the site suggest a release may have occurred; and
- b. Investigation is required by the Director to determine the source of a release.
- c. The Director may require a Release Characterization Report when unusual operating conditions at a facility create reasonable suspicion of a leak or release and therefore warrant further investigation. All pertinent operation and maintenance records must be included in the report.

D. ~~Leak and Release~~ Reporting Requirements

- 1. During normal working hours reports of overfills, spills, leaks, or releases should be made to the DEM UST Section at (401)-222-2797; fax (401)-222-3813. At all other times, reports can be made to the DEM 24-hour Emergency Response Hotline at (401)-222-3070.
- 2. All persons shall immediately report all confirmed and suspected leaks or releases from USTs to:
 - a. The Director;
 - b. The appropriate local fire official;
 - c. The local public water supplier, in the event a spill occurs in a public supply watershed or in a wellhead protection area for ~~community water supply wells~~community water systems, non-transient non-community water systems, or transient non-community water systems.
- 3. Persons reporting leaks or releases to the Director shall provide the following information:
 - a. Name and phone number of person reporting the release;
 - b. Location of the release and name of the facility;
 - c. Date and time of the release;
 - d. Type, and to the extent known, the amount of material released;
 - e. Name and phone number of the potentially responsible party, if known.
- 4. ~~UST and/or product pipeline Tank and/or line and/or line~~UST and/or product pipeline Tank and/or line and/or line-tightness test ~~results~~and secondary containment test results which are fail or inconclusive shall be reported to the Director by the tester ~~immediately. within two (2) hours of the test~~immediately. The owner/operator must submit the failed test within ~~fifteen (15)~~immediately. days of the test date and submit a Release Characterization Report in accordance with § 1.14(G) of this Part.

- a. Product pipelines Lines that test as failed or inconclusive shall be taken out of service immediately.
- b. The owner/operator must have the contents of the UST system completely removed within 24 hours; or
- c. The owner/operator must make arrangements for a retest of the UST system, and the retest must be conducted within ~~3~~three days. If the UST system retest results indicate a failed or inconclusive test, the owner/operator must have the contents of the UST system completely removed within 24 hours of the retest.
- d. If the system test confirms a leak into the interstice or a release, owners and operators must repair, replace, upgrade, or close the UST system. In addition, owners and operators must investigate and remediate any releases in accordance with this Section.

E. Initial Abatement Actions

1. Unless directed by the Director to do otherwise, when a confirmed release occurs, the owner/operator shall take the following actions:
 - a. ~~All contents of the UST, UST system, and/or product piping shall be completely removed as soon as possible, and under no circumstances more than 24 hours after the discovery of the release. Arrange for and within 24 hours and as soon as practicable, complete removal of the contents of the UST system to prevent further release into the environment;~~
 - b. Contain all regulated substances discharged or and 1, oil-contaminated debris and hazardous waste. Such materials shall be handled, stored and disposed of in accordance with the state Oil Pollution Control Regulations, Subchapter 25 Part 2 of this Chapter and other applicable state and federal statutes, Rules and Regulations;
 - c. Assess fire, health and safety hazards and take reasonable steps to mitigate any such hazards; local fire officials should be consulted, as conditions require;
 - d. Inspect any exposed releases and take steps to prevent the migration of any released regulated substance into the environment, including soils, groundwater or surface waters;
 - e. Investigate for the presence of free product and, if present, initiate free product removal consistent with § 1.14(F) of this Part; and

- f. Carry out other actions as directed by the Director pursuant to Oil Pollution Control Regulations, Subchapter 25 Part 2 of this Chapter, or other local, state and federal statutes, Rules and Regulations.

F. Free Product Removal:

1. At sites where free product is present, the owner/operator shall remove the free product in a manner that minimizes the spread of contamination.
2. Discharges and by-products from free product recovery and disposal operations shall be treated or disposed of in compliance with all applicable state and federal statutes, Rules and Regulations.
3. Free product removal systems shall be designed to maximize the removal of free product.
4. Documentation of all free product removal measures shall be submitted to the Director with the Release Characterization Report and Site Investigation Report as required pursuant to §§ 1.14(G) and 1.14(H) of this Part respectively, and shall contain the following information:
 - a. Names of persons implementing the free product removal measures;
 - b. Estimated quantity, type and thickness of free product observed or measured;
 - c. Type of system used to remove free product;
 - d. Locations of any discharges associated with free product recovery activities;
 - e. Type of treatment applied to any water pumped for the purpose of free product removal; and
 - f. Disposition of recovered free product.

G. Release Characterization Report:

1. Within seven ~~(7)~~ days after confirmation of a leak or release or a failed tank and/or product pipeline line-tightness test, the owners/operators shall submit a Release Characterization Report to the Director summarizing the events related to the leak or release from a UST or UST system and describing the results of initial abatement steps. Such report shall include:
 - a. Data on the nature and estimated quantity of the release;
 - b. Data from available sources and site investigations concerning these factors:

- (1) Surrounding populations;
- (2) Water quality;
- (3) Use and approximate locations of wells potentially affected by the release;
- (4) Subsurface soil conditions;
- (5) Locations of subsurface sanitary sewers and stormwater lines;
- (6) Climatological conditions, where pertinent; and
- (7) Land use;

- c. Names, addresses, and plat and lot numbers of the owners of all properties that abut the facility;
- d. All pertinent data obtained from actions taken as Initial Abatement Actions pursuant to § 1.14(E) of this Part;
- e. Name and address of the facility.

2. A Release Characterization Report is not required when the release is documented in a Closure Assessment Report prepared and submitted to the Director in accordance with § 1.15(D)(10) of this Part.

~~If the Release Characterization Report is related to a tightness test(s), then the report shall also include:~~

~~Name and phone number of the tank owner/operator;~~

~~Size of the UST(s) and material stored;~~

~~Copy(ies) of the failed tightness test(s);~~

~~Information on any repairs conducted;~~

~~Copy(ies) of any retests conducted;~~

~~The present status of the UST(s).~~

~~A Release Characterization Report is not required when the release is documented in a Closure Assessment Report prepared and submitted to the Director in accordance with Rule 13.11.~~

H. Site Investigation:

1. The purpose of the Site Investigation and the preparation of a Site Investigation Report shall be to determine the presence of, and/or define the nature, degree and extent of contamination and identify threats to the public health and environment.
2. Upon completion and submittal of a Release Characterization Report or Closure Assessment Report, owners/operators shall conduct a full investigation of the release and the on-site and off-site areas known or potentially affected by the release. The Director may waive the requirement to conduct a full site investigation when the initial Release Characterization Report or Closure Assessment Report establishes, to the satisfaction of the Director, that there is no present or potential groundwater or surface water adverse impact from the release. The Director may require additional information or investigation before deciding whether to waive the requirement for a full site investigation.
3. A Site Investigation shall be conducted and a Site Investigation Report submitted under the following additional circumstances unless otherwise exempted by the Director:
 - a. An inspection of a UST system or facility revealed violations of this Part which could result in the release of the contained substances; or
 - b. Other evidence of a leak or release exists, including but not limited to failed tank or line tightness tests or perforated or highly corroded tanks or piping; or
 - c. A facility has been abandoned as defined by § 1.5(A)(1) of this Part or does not meet the operational and testing requirements discussed in § 1.10 of this Part; or
 - d. At the discretion of the Director.
4. The party performing the Site Investigation shall submit a proposed scope of work to DEM within 30 days, which must be approved prior to commencing any on-site work to ensure it meets the requirements of the project. Any Site Investigation Report submitted without prior approval of a scope of work may be rejected by DEM as unsatisfactory.
5. The Site Investigation and Site Investigation Report, along with all associated field work, must be conducted by, or under the direction of, a licensed Professional Engineer, Certified Professional Geologist, or Registered Professional Geologist.
6. The owner/operator shall submit the results of a ~~s~~Site IInvestigation to the Department within ~~sixty (60)~~ days of notification by the Director that a Site Investigation Report is required, or within an alternate deadline approved by the Director, in the format of a Site Investigation Report pursuant to ~~§~~ 1.14(H)(7) of this Part.

~~Site Investigation Report:~~

~~The purpose of the Site Investigation Report shall be to define the nature, degree and extent of contamination and identify threats to the public health and environment.~~

7. The Site Investigation Report shall include, but not be limited to, the following information:
 - a. A ~~locationeus~~ map showing the street address and the latitude/longitude of the subject site underlain on either a topographic map or aerial photo; using the U.S. Geological Survey 7.5 minute quadrangle map;
 - b. A description of past and present activities on the site, including a list of past owners and operators of the site and the approximate time periods of their ownership and operation;
 - c. A compliance history of the site including, but not limited to, any and all past environmental enforcement actions and documentation of any past releases, repairs and leak detection results;
 - d. A site plan, drawn to scale, showing the location and the immediately surrounding area, and identifying the following items:
 - (1) Property boundaries;
 - (2) Buildings and other structures;
 - (3) Roads;
 - (4) Surface topography;
 - (5) Surface water courses and wetlands;
 - (6) Public and private water wells;
 - (7) Groundwater monitoring wells;
 - (8) Public sewer and water lines;
 - (9) Individual sewage disposal systems and other waste disposal areas;
 - (10) Present and former locations of USTs and associated piping;
 - (11) Dry wells; and
 - (12) Locations of soil borings, test pits or piezometers;
 - e. A description of the site's hydrogeology, including, but not limited to:

- (1) Depth to groundwater and groundwater elevations, including water table contour map, where applicable;
 - (2) Groundwater flow direction;
 - (3) Description of the unconsolidated materials (in both the unsaturated and saturated zones), including permeability, porosity, degree of stratification, and the capacity for contaminant attenuation;
 - (4) Depth to bedrock and bedrock characteristics;
 - (5) Aquifer characteristics including saturated thickness, hydraulic conductivity, and transmissivity; and
 - (6) The presence and effects of both natural and man-made barriers to and conduits for contaminant migration.
- f. A description of the area surrounding the site and identification of all human and environmental receptors, including, but not limited to:
- (1) The location of properties served by private wells;
 - (2) The location of public wells;
 - (3) Which wells would be potential contaminant receptors; and
 - (4) The classification of groundwater and surface waters surrounding the site;
- g. The nature, degree and extent of contamination, including free product, groundwater, soil, and vapor; including isopleth maps of contaminants, where applicable;
- h. The results of any analytical testing of groundwater or soil on the site, including identification of methods used and sampling protocols;
- i. A minimum of three groundwater monitoring wells located so that the groundwater flow direction and the nature, degree and extent of contamination from leaks and releases from USTs can be determined. [§] Monitoring wells shall be installed in accordance with ~~§ 1.11 (R) of this Part and Appendix 1 RI DEM "of the Rules and Regulations for~~ Groundwater Quality Rules." The following information must be included:
- (1) Boring logs and well completion information;
 - (2) Well development and sampling procedures;

- (3) Results of field screening and laboratory analysis of soil and groundwater samples; and
 - (4) Well gauging information;
 - j. Any other factors necessary for or that contribute to an adequate site characterization;
 - k. Conclusions and recommendations, including;
 - (1) A description of the source or potential sources(s) of the contamination;
 - (2) A description of the current extent of contamination in the soil and groundwater, as well as in surface water, and the presence of vapors;
 - (3) Identification of potential receptors; and
 - (4) Recommendations for further investigation and corrective action or a statement that no further action is required.
 - l. The Site Investigation Report shall include the following signed statements:
 - (1) A statement signed by the registered professional engineer, or the certified professional geologist, or the registered professional geologist, who prepared the report or who directly supervised preparation of the report, certifying the accuracy of the information contained in the report; and
 - (2) A statement signed by the ~~owner/operator~~responsible party and/or owner/operator responsible for the preparation and submittal of the report certifying that the report is a complete and accurate representation, and that it includes all known facts about the discharge or release that has resulted, or may result, in the exceedance of a groundwater quality standard.
- 8. Additional Information:
 - a. Upon review of the Site Investigation Report for completeness and accuracy, the Director may require the collection and submission of additional information where a Site Investigation Report is found to be incomplete or deficient or does not provide sufficient data to identify the extent of a contamination plume. The Director may require the following:
 - (1) The installation and monitoring of groundwater monitoring wells sufficient to accurately characterize the release.

(2) The sampling of nearby public and private drinking water wells.

(3) Groundwater monitoring on a periodic schedule.

(4) Any other necessary information to complete the report.

b. Any required additional information shall be submitted within a time frame specified by the Director.

9. No Further Action

a. The Director may issue a letter requiring no further action upon review of the Site Investigation Report when:

(1) The contaminant concentrations are found to be below applicable standards;

(2) No threat to human health or the environment exists;

(3) The Site Investigation Report concludes and/or recommends that no further action is needed based on the results of the investigation; and

(4) The report is found to be complete and accurate to the satisfaction of the Director.

I. Corrective Action Plan

1. The purpose of Corrective Action and the preparation of a Corrective Action Plan shall be to protect the public health and environment in a manner acceptable to the Director.

2. Based upon the Site Investigation Report or other data, the Director shall require~~Based upon the Site Investigation Report or other data, the Director shall require~~may require owners/operators to develop and submit a Corrective Action Plan, within 90~~60~~ days, or within an alternate time frame approved by the Director, to address contaminated soils or groundwater or other related environmental or public health impacts. The Director may waive the requirement to prepare a Corrective Action Plan when the Site Investigation Report or other data establishes, to the satisfaction of the Director, that there is no present or potential groundwater or surface water adverse impact from the release. The Director may require additional information before deciding whether to waive the requirement for a Corrective Action Plan.

3.- The party performing the Corrective Action shall submit a proposed scope of work to DEM within 30 days, which must be approved prior to commencing any on-site work to ensure it meets the requirements of the project. Any Corrective Action Plan submitted without prior approval of a scope of work may be rejected by DEM as unsatisfactory.

~~The Corrective Action Plan shall be prepared by an environmental consultant.~~

~~In order to be approved, the Corrective Action Plan must protect human health and the environment in a manner acceptable to the Director.~~ 4. Contents of Corrective Action Plan -

A Corrective Action Plan shall, at minimum, consist of the following:

- a. A summary of findings from the Site Investigation Report, including but not limited to:
 - (1) Impacts and potential impacts to receptors such as groundwater, surface water, public and private wells, environmentally sensitive areas, buildings and basements;
 - (2) All data from testing of all environmental media including soil, water and air, site geology and hydrogeology; and
 - (3) Any additional information the Director may require;
- b. A description of the proposed method for remediation, including, but not limited to, the following:
 - (1) Justification of the ability of the chosen remedial method(s) to meet the remediation objectives within a time frame acceptable to the Director;
 - (2) Detailed design plans including equipment specifications, piping routes, process flow diagrams, instrumentation, and any other information necessary to fully describe the remedial system. Engineered remedial systems must be signed and stamped by a registered professional engineer.
 - (3) Proposed plans for the disposal of any products or by-products from the remediation activities;
- c. ~~The results of any a~~Aquifer testing or and/or pilot testing specific to the remediation technology is required in a Corrective Action Plan. Aquifer and/or pilot testing can be waived only in writing by the Director. to support the remedial system, or a detailed proposal to conduct such testing.
- d. A proposed schedule for implementation of the corrective action plan;
- e. Proposed methods of public notification;
- f. A proposed groundwater monitoring program including the monitoring wells to be sampled, frequency of sampling, analyses to be conducted and well gauging, and a proposed frequency of reporting to the Director;

- g. Any other information necessary to support the proposed remedial action.
 - h. The Corrective Action Plan shall include the following signed statements:
 - (1) A statement signed by the registered professional engineer, or the certified professional geologist, or the registered professional geologist, who prepared the plan or who directly supervised preparation of the plan, certifying the accuracy of the information contained in the plan; and
 - (2) A statement signed by the facility responsible party and/or owner/operator responsible for the preparation and submittal of the Corrective Action Plan, certifying that the plan is complete and accurate.
5. Approval of Corrective Action Plans - The Director shall approve, approve with conditions or reject Corrective Action Plans based upon the following criteria:
- a. The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration;
 - b. The hydrogeologic characteristics of the facility and the surrounding area;
 - c. The proximity, quality, and current and future uses of nearby surface water and groundwater;
 - d. The potential effects of residual contamination on nearby surface water and groundwater;
 - e. Reliability and technical feasibility of the proposed corrective action technologies as to their potential to achieve contamination removal, within a time frame acceptable to the Director; and
 - f. Completeness and accuracy of the information submitted in the Corrective Action Plan.
6. Orders of Approval
- a. Upon approval of the Corrective Action Plan, the Director may ~~issue an Order of Approval governing the Corrective Action Plan consistent with § 1.14 of this Part, and RI DEM "Groundwater Quality Rules."~~ the Groundwater Quality Regulation Owners/operators shall implement the plan in accordance with the provisions of the Order of Approval, and any conditions, established by the Director contained therein. The Order of Approval shall include, where applicable:
 - (1) Specific reference to the Corrective Action Plan;
 - (2) A schedule for implementation including installation and start up;

- (3) Contingencies for potential additional necessary actions or other necessary modifications;
- (4) A schedule for groundwater monitoring;
- (5) A schedule for system inspections;
- (6) A schedule for submission of status reports;
- (7) Any other reporting obligations to the Director such as system shutdown; and
- (8) Any other site specific requirements.

- b. The Director, at his/her discretion, may issue an interim letter of approval to allow a specified time frame for the generation of additional information about the proposed corrective action, including, but not limited to, pilot testing or a trial period of operation of the remedial system.
- c. The Director, at his/her discretion, may approve a Corrective Action Plan in a letter of approval for proposed remedial actions that are limited in duration or complexity, including, but not limited to, soil removal, monitored natural attenuation or enhanced natural attenuation.
- d. Interim Corrective Action Prior to Issuance of Orders of Approval - Owners and operators may begin cleanup of soil and groundwater before the Corrective Action Plan is approved provided that they:
 - (1) Notify the Director of their intention to begin cleanup;
 - (2) Comply with any conditions imposed by the Director, 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 Director for approval.

7. Public Notification:

- a. ~~The Director shall provide written notice to the town or municipality of the on-going investigation of confirmed releases from UST facilities, at the time when the Director requires a Site Investigation Report.~~ The Director shall provide ~~written~~ notice to the town or municipality and/or public of approved Corrective Action Plans, and may require the responsible party to provide wider notice by block advertisement, ~~and/or~~ legal advertisement, or letters to individual property owners.
- b. The Director shall provide ~~written~~ notice to the town or municipality and/or public of consideration to terminate an Order of Approval in the event that

the Corrective Action Plan referenced in the order does not achieve the established clean up levels originally required.

~~The public notice provided in sub-paragraphs (A), (B), and (C), above, shall be provided by letter and directed to the chief executive municipal officer or mayor, if performing similar responsibilities, and shall direct the letter to be posted in the city or town hall.~~

8. Recording of Orders of Approval

- a. Orders of Approval relating to Corrective Action Plans shall be recorded in the municipal land evidence records by the owner and/operator of the facility within 10 days of issuance by the Director and documentation of the recording shall be submitted to the Director by the owner and /operator within 10 days of the recording.

9. Additional Information

- a. Upon review of the Corrective Action for completeness and accuracy, the Director may require the collection and submission of additional information where a Corrective Action is found to be incomplete or deficient or does not achieve established cleanup standards. The Director may require the following:
- (1) The installation and monitoring of groundwater monitoring wells sufficient to accurately characterize the release.
 - (2) The sampling of nearby public and private drinking water wells.
 - (3) Groundwater monitoring on a periodic schedule.
 - (4) Any additional information required to complete the cleanup.
- b. Any required additional information shall be submitted within a time frame specified by the Director.

10. No Further Action

- a. The Director may issue a no further action letter upon completion of the corrective ~~remedial~~ action where:
- (1) The monitoring-status reports have been submitted in accordance with the approved schedule, were found to be complete and accurate, and demonstrate that the contaminant concentrations are at or below applicable standards; or
 - (2) The threat to human health and the environment has been eliminated or reduced to the satisfaction of the Director.

J. Report Submittals

1. All reports submitted to the Department per the requirements of this Section must be submitted in both hardcopy and electronic format (as specified by the Department).

1.15 Closure

A. Applicability

- This Section shall apply to all facilities where ~~petroleum-regulated substances product(s)~~ and/or hazardous materials are or were stored as defined in § 1.4 of this Part. §§ 1.15(D)(10)(a) ~~and 1.15(D)(8)(a)(6)~~ of this Part shall not apply to the following:
 - USTs which store fuel oil consumed on-site solely for heating purposes;
 - USTs of less than 1,100 gallons in capacity which store motor fuels at farm or residential sites, provided that the fuel is for on-site use; or
 - Holding tanks.

B. Prohibitions

- The abandonment of any UST or UST system is prohibited. Any UST, or UST system that has been out of service for greater than 180 days and not in approved temporary closure shall be considered abandoned.
- The removal, filling, or other permanent closure of any UST, UST system, and/or product pipeline or UST system, that is required to be registered with the Department under § 1.4 of this Part is prohibited except as permitted by this Section after obtaining prior approval from the Director.
- The removal from service or other temporary closure of any UST that is registered or required to be registered in accordance with these regulations is prohibited except as permitted by this Section~~Regulation~~.

C. Temporary Closure

- Temporary closure is not an alternative to permanent closure or UST removal. Temporary closures approved by the Department do not remove the obligation of owners/operators to comply with the requirements of this Part.
- Limitations

- a. Prior to the temporary closure of UST systems included in _____ § 1.15(C)(2) of this Part, owners/operators must receive written approval from DEM.
- b. Initial (first-time) temporary closures are approved for a period of one year (365 days) from the date the application was received.
- c. All single-walled UST components must be permanently closed according to the schedule outlined in § 1.10(D) of this Part regardless of temporary closure status.

3. Eligibility

- a. In order to be eligible for a temporary closure the UST system must meet the following requirements:
 - (1) All USTs must contain less than 1" of product.
 - (2) All product piping and vapor return lines must be empty and purged of any remaining product.
 - (3) All product fill ports, Stage I and Stage II vapor Recovery ports, and any other accessible ports must be sealed with a locking tamper-proof cap and locked with a weather-resistant padlock.
 - (4) All vent lines shall contain appropriate vent caps that are fully functional and not sealed.
 - (5) Electricity to all pumps and dispensers shall be physically disconnected or locked out/tagged out.
 - (6) There must be a certified Class A and Class B, or Class A/B, operator assigned to the UST system.
 - (7) The UST system is not required to have active leak detection monitoring as long as there is < 1" of product in the tank.

4. Applying for Temporary Closure

- a. All requests for temporary closure must be submitted on the Temporary Closure Application form available on the Department website. Other methods of requesting temporary closure, including written requests, are not valid.
- b. Requests for temporary closure must be submitted at least 15 days in advance of the requested effective temporary closure date.

- c. The temporary closure application should include supporting documentation to show that the UST system meets any and all applicable requirements identified in § 1.15(C)(3) of this Part.
- d. Owners/operators should not assume their application for temporary closure has been approved until they receive an approval letter and must continue to maintain normal operating procedures until the temporary closure application has been approved.

5. Requirements While in Temporary Closure

- a. Owners/operators of temporarily closed UST systems must continue to comply with release reporting and response requirements as outlined in § 1.14 of this Part.
- b. Cathodic protection surveys must be completed according to the normal schedule identified in § 1.10(E) of this Part. If an impressed current cathodic protection system is in place, it must be checked for proper operation every 60 days.
- c. A Class A, Class B, or Class A/B operator must be registered with DEM for the entire duration of the temporary closure and must visit the site biannually to ensure the facility and the UST components are in good condition, there are no missing components, lids, covers, or other safety devices, and no unsafe situations are developing on the property.
- d. The Class A, Class B, or Class A/B operator must measure the product and water level in the tanks a minimum of once per year. If there is any change in the product or water level in the tanks, DEM must be notified within 24 hours and corrective action ~~will~~ may be required.
- e. Shear valves (i.e., Crash Valves), the continuous monitor system, sump sensors, overfill protection devices, spill buckets and sump interstitial space tightness, and liquid line leak detectors are not required to be tested while in temporary closure, however, must be tested prior to the addition of a ~~regulated material~~ regulated substances to the UST system.
- f. UST and product piping tightness testing (e.g., interstitial space tightness testing on double wall tanks and lines or primary wall tightness for single wall tanks and lines) are not required to be performed while in temporary closure. However, tightness testing must be conducted prior to placing any ~~product or regulated or~~ hazardous materials in the UST. Any failed or inconclusive test results must be immediately investigated and repaired within 30 days.
- g. The owner must continue to pay all UST registration fees throughout the duration of the temporary closure.

- h. The owner/operator must comply with any other applicable Federal, State, and local regulations.
- i. Inventory reconciliation and 0.2 GPH leak rate tests for single-walled tanks are not required to be performed while in approved temporary closure.
- j. Approval of the temporary closure may be revoked at any time by DEM for failure to meet the minimum requirements identified in ~~§~~ § 1.15(C) of this Part or for submittal of false information.

6. Re-Opening the UST System or Requesting an Extension to a Temporary Closure

- a. The owner/operator of the facility must notify DEM 30 days prior to re-opening the UST system and must receive prior written approval before adding or dispensing any ~~regulated or~~ regulated substances or hazardous materials substance to the UST system.
 - (1) The completion of a Site Investigation and Site Investigation Report (SIR) in accordance with § 1.14 of this Part is required.
 - (2) DEM may require additional testing, certification of components, additional documentation, repairs, payment of fees prior to granting permission to re-open a temporarily closed UST system.
 - (3)- If an owner/operator requested temporary closure due to failed UST system component(s), the component(s) must be repaired prior to reopening or requesting an extension to the initial temporary closure application.
- b. The owner/operator may request up to four temporary closure extensions in increments of one year (365 days).
 - (1) All extension requests require documentation of an inspection conducted by the registered Class A or Class A/B operator conducted within 30 days of the application to document the UST facility conditions.
 - (2) DEM may require additional testing, completion of a Site Investigation and Site Investigation Report (SIR), certification of components, additional documentation, repairs, and payment of fees prior to granting an extension to the temporary closure.
 - (3) Extension requests must be submitted 30 days prior to the expiration of the current temporary closure and be submitted on the Temporary Closure Application form available on our website.

(4) A UST system may not be closed for more than five (5) years as measured by the date of the original temporary closure approval. Any UST system which has been closed for more than five years must be permanently closed in accordance with § 1.15(D) of this Part.

~~The owner/operator of any underground storage tank that is removed from service shall:~~

~~Evacuate tank contents by pumping down to less than an inch of liquid product;~~

~~Cap and secure all fill lines against tampering;~~

~~Secure manways, pumps and other components;~~

~~Pump out suction lines;~~

~~Keep the vent lines open;~~

~~Maintain records regarding:~~

~~UST location and size;~~

~~The date on which USTs were taken out of operation;~~

~~The procedures used to maintain the facility in a safe condition;~~

~~Continue to comply with all general operating requirements, including but not limited to:~~

~~Maintenance of corrosion protection,~~

~~Release reporting and investigation, and~~

~~Leak and spill response and corrective action requirements;~~

Notify the Director in writing within 15 days of any temporary closure, which USTs have been put into temporary closure and the actions taken to satisfy the requirements of Rule 13.03.

~~The Director may require temporary closure of UST systems for which operational conditions or other information indicate a leak or release.~~

Extension of Temporary Closure: ~~The Director may extend the period of temporary closure to more than 180 days upon a showing of good cause by the owner/operator. Written requests for approval of an extension extension must be submitted to the Director no later than 150 days from the date the underground storage tank(s) was/were temporarily removed from service. Owners/operators may request approval for an extension of temporary closure for a period of no greater than 6 months. Written requests for approval for an additional extension of temporary closure must be submitted to the Director at least 30 days prior to the approved period of temporary closure expires, must be for a period no greater than 6 months, and must be~~

~~accompanied by a Site Investigation Report conducted in accordance with Rules 12.08 and 12.09. Approval for any further extensions of temporary closure are at the discretion of the Director.~~ D. Permanent Closure

1. Any UST, UST system, or product pipeline which is regulated under § 1.4 of this Part, is subject to the permanent closure requirements outlined in this Regulation. All permanent closures shall comply with the provisions of this Regulation and appropriate national codes of practice, including but not limited to "Closure of Underground Petroleum Storage Tanks", incorporated above atin § 1.3(CC) of this Part and "Safe Entry and Cleaning of Petroleum Storage Tanks", incorporated above atin § 1.3(DD) of this Part.
2. Prior approval and oversight from DEM is required for the permanent closure of any UST, UST system, or product pipeline before commencing any closure activities.
3. Permanent closure of a UST, UST system, or product pipeline may be requested by an owner at any time. Permanent closure of a UST, UST system, or product pipeline may be required under the following circumstances:
 - a. The UST, UST system, or product piping has been abandoned;
 - b. Any component of the UST, UST system, or product pipeline -has exceeded the maximum temporary closure duration of 5five years;
 - c. The UST, UST system, and/or product pipeline has failed tightness testing and are unable to be satisfactorily repaired, exhibit evidence of structural failure, excessive corrosion, or damage;
 - d. The UST, UST system, or product pipeline no longer meets the minimum requirements outlined in §§ 1.10 and § 1.11 of this Part;
 - e. The UST, UST system, product pipeline, or UST components exhibit evidence of a release;
 - f. As required by the Director.

~~All owners/operators that have removed any underground storage tank from operation for more than 180 days and have not been granted an extension of temporary closure by the Director or who have abandoned any UST or who desire to permanently close a UST shall comply with the procedures for closing underground storage tank(s) in accordance with the provisions of this Rule and appropriate national codes of practice. The Director may require permanent closure of UST systems for which there is confirmation of a leak or release.~~

4. Closure Applications -

Owners/operators wishing to close ~~one or more USTs~~ a UST, UST system, or product pipeline, shall submit a UST and Product Pipeline ~~Permanent~~ Closure ~~a~~ Application form, available on our website, to the Director at least ten ~~(10)~~ days prior to the date the UST or product pipeline ~~UST~~ is to be permanently removed from service. Closure applications are valid for a period of one year. Such application shall be made on forms provided by the Department and shall include, but not be limited to:

- ~~a. The date the UST, UST system, and/or product pipeline is to be or was permanently removed from service;~~
- a. The date of installation of the UST, UST system, and/or product pipeline;
- b. The type of substance or material that was stored in the UST, UST system or product pipeline;
- c. The closure method to be used and contractor to perform the work;
- d. The size, type and location of the UST, UST system, and/or product pipeline;
- ~~e. The proposed date of UST, UST system, and/or product pipeline excavation if it is to be removed from the ground;~~
- e. Appropriate documentation demonstrating compliance with the approved closure procedures including, but not limited to:
 - (1) The method(s) to be used to empty the ~~tank~~ UST and/or product pipeline prior to excavation;
 - (2) The method to be used to remove the ~~tank~~ UST or product pipeline from the excavation;
 - (3) The names and contact information for the consultant who will prepare and submit method(s) to be used to comply with the closure assessment report as described in requirements of § 1.15(D)(10) of this Part.
- f. A description of the method(s) to be used to properly and safely vent the UST(s) and/or product pipeline ~~tank~~, and to properly make openings in the UST(s), including:
 - (1) Appropriate venting must be carried out both before any cutting of the tank, and before offsite transport of any tank which has not been completely cleaned per § 1.15(D)(8)(a)(3) of this Part. ~~Rule 13.09(C), below.~~

- (2) A description of the instruments to be used to verify that the tanks have been properly vented.
- (3) A description of how any residues in the tank will be managed; and
- (4) Appropriate documentation demonstrating notification of local fire officials.

~~Appropriate venting must be carried out both before any cutting of the tank, and before offsite transport of any tank which has not been completely cleaned per Rule 13.09(C), below.~~

~~A description of the instruments to be used to verify that the tanks have been properly vented.~~

~~A description of how any residues in the tank will be managed; and~~

~~Appropriate documentation demonstrating notification of local fire officials.~~

5. Closure Application Fees

- a. There shall be a fee for processing a closure application, which shall be submitted with the application form(s). The closure application is valid for a period of one year, so once the year expires a new application and ~~new~~ processing fees must be resubmitted.
- b. The processing fee shall be \$75.00 per UST to be closed.
- c. Payment of the fee, and all unpaid registration fees and late fees shall be made in the full amount. Checks or money orders shall be made payable to the "State of Rhode Island, General Treasurer~~Treasurer, State of Rhode Island~~", to be placed in a restricted receipt account to be used for the UST Program.

6. Emergency Closures

1. ~~_____~~ The time frame requirements in § 1.15(D)(4) of this Part Rule 13.06 may be waived by the Director in the event of an emergency UST, UST system, or product pipeline closure. A closure assessment report may be required for any emergency closure.

7. Illegal Tank Removals:

- a. Upon the discovery or reporting of a regulated UST, UST system, or product pipeline that was closed without compliance with this Part-, the UST owner /operator shall perform the following:

- (1)- Submit a completed UST and Product Pipeline closure application in accordance with § 1.15(D)(4) of this Part.
- (2)- Perform test pits with the number and locations as directed by DEM.
- (3) Submit a completed Closure Assessment Report in accordance with § 1.15(D)(10) of this Part.

8. UST and Product Pipeline Removal

- a. Upon approval by the Director of an application to close USTs, the UST system, or product pipelines, ~~the owner/operator~~ may permanently close ~~underground storage tanks by removing the specified components USTs and related facility components~~ provided that:
 - (1) All product is removed from the UST(s), UST system, and/or product pipelines; ~~and connecting lines;~~
 - (2) Local fire safety officials have been notified of the date, time, and place of removal activities;
 - (3) The UST and product pipelines have been ~~is~~ cleaned to remove any remaining product or residual material and such product or residual material is disposed of in accordance with applicable federal, state and local statutes, ordinances, Rules and Regulations;
 - (4) The gaseous vapors are released at the site in a safe manner consistent with national codes of practice, and in accordance with the closure application submitted to and approved by the Director;
 - (5) The owner/~~operator~~ shall make arrangements such that, the UST(s) and product pipeline to be closed and the excavation zone shall be made available to be viewed and inspected by DEM personnel during the scheduled closure process, at the discretion of the Director.
 - (6) The owner/~~operator~~ is required to retain an environmental consultant to be present on the site during the ~~tank~~UST and/or product pipeline removal process in order to ensure that an adequate closure assessment is performed, where required.
 - (7) Before final disposal, openings shall be made in the UST(s) to render it unfit for further use;

- (8) Any excavated contaminated soil or debris is stored, handled and disposed of in accordance with appropriate state and federal statutes, ~~R~~rules or ~~R~~regulations; and
- (9) The owner/~~operator~~ of the facility, as well as the person responsible for transporting any residues or contaminated soil generated by the closure, must keep records indicating the final destination for all such materials, the date(s) of such shipment(s), and the person or company responsible for the transportation. In the case of material managed as a hazardous waste, the manifest required by the Department's Rules and Regulations for Hazardous Waste Management, Subchapter 10 Part 1 of this Chapter will satisfy this requirement.

9. UST and Product Pipeline -Closure in Place

- a. Upon approval by the Director, ~~of an application to close USTs,~~ the owner of a facility may permanently close UST(s), UST system, or product pipeline ~~underground storage tanks~~ via a Closure In Place which by allowing ~~allows~~ the UST(s) and/or associated facility ~~components~~ to remain in the ground provided that:

- (1) The owner/~~operator~~ requests approval for closure in place in writing to the Director and approval is granted prior to the closure. The request must provide specific detailed information that demonstrates closure in place is necessary because the removal of the UST(s) or product pipeline would adversely impact the structural integrity of a building, permanent structure, sensitive/critical utilities, or other active UST(s) or product pipelines, or the removal of the UST(s) or product pipeline would adversely impact an environmentally sensitive area, or the UST(s) or product pipeline is inaccessible to typical removal equipment.
- (2) For tanks and product pipelines not exempted from closure assessments by § 1.15(A) of this Part, the request must include a scope of work for the closure assessment that includes soil and groundwater sampling sufficient to determine whether a release has occurred. The closure assessment report must be prepared in accordance with ~~—~~§ 1.15(D)(10) of this Part Rule 13.11 and submitted to the Director within 30 days of the closure.
- (3) For UST(s) and/or product pipelines ~~tanks~~ exempted by § 1.15(A) of this Part, Rule 13.01, the owner/~~operator~~ must either conduct a closure assessment or opt to have all USTs and product pipelines ~~lines~~ tightness tested. If ~~all~~ any test results are not passing, a closure assessment is required and a scope of work for soil and groundwater sampling sufficient to determine if a release has occurred must be submitted for prior approval by the Director.

- (4) All product is removed from the UST(s) and ~~from all connecting product pipelines~~;
- (5) The UST(s) ~~and, if applicable, product pipelines, is~~are cleaned to remove any remaining product or residual material and such product or residual material is disposed of in accordance with applicable federal, state and local statutes, ordinances, Rules and Regulations;
- (6) All fill, gauge, pump and vent lines are disconnected and all inlets and outlets are permanently capped or plugged; and
- (7) All USTs ~~are~~ are filled completely with a slurry concrete or flowable fill and all remaining ~~product pipelines are underground piping associated with the USTs are~~ permanently capped and secured against tampering.

10. Closure Assessment Report:

- a. Except as otherwise provided in ~~§ 1.15(A) of this Part Rule 13.01~~, the owner/~~operator~~ of any UST, UST system, and/or product pipeline which is to be permanently closed, shall have a closure assessment performed to determine if a release has occurred. The closure assessment will also be required of those USTs and product pipelines exempted by § 1.15(A) of this Part ~~Rule 13.01~~ when evidence of a release is discovered during closure.
- b. The closure assessment shall be conducted by and a closure assessment report prepared by an environmental consultant, in accordance with this rule and the DEM's UST Closure Assessment Guidelines. ~~The~~ Closure Assessment Report shall include, but not be limited to:
 - (1) A background description of the site including location, use of the facility, and a summary of any available tank and line leak detection results;
 - (2) A locus map using the U.S. Geological Survey 7.5 minute quadrangle map;
 - (3) A detailed site plan showing the location of all former or existing USTs, product and vapor line pipelines~~piping~~, dispensers, buildings, utilities, monitoring wells, drinking water wells, soil screening locations, soil sampling locations and any other pertinent site features;
 - (4) Descriptions of all USTs and product pipelines~~are~~ closed including size, construction type, depth to tank bottom, age and stored material;

- (5) A description of the condition of the USTs and product pipelines~~pipings~~ including extent of corrosion, identification of any holes and any other indication of leakage;
- (6) Photographic documentation of the condition of each UST and/or product pipeline ~~tank~~ removed;
- (7) A description of the soil conditions in the excavation zone such as soil classification, gradation, extent of compaction and any other notable physical characteristics;
- (8) A description of soil contamination, including visual and olfactory observations, field screening and laboratory analytical methods used and all results;
- (9) A description of groundwater encountered in the excavation zone including depth to water and appearance with respect to the presence of any sheen or free product;
- (10) A description of groundwater obtained from monitoring or observation wells, where present, including any gauging results;
- (11) Identification of the DEM groundwater classification at the site and surrounding areas, the availability of public water and presence of private or public wells;
- (12) Any potential receptors such as, but not limited to, surface waters, basements, storm drains, sewer lines or other utilities where contamination is identified;
- (13) Description of the management of all excavated contaminated soil, including proper cover while stockpiled on-site and documentation of proper disposal;
- (14) Documentation of proper disposal of the tank(s) and the residual sludge material;
- (15) Any other information or documentation required to complete the closure assessment; and
- (16) Conclusions as to whether a release has occurred and recommendations for further investigation and/or remediation.

c. The closure assessment report shall include the following signed statements:

- (1) A statement signed by the registered professional engineer, or the certified professional geologist, or the registered professional geologist, who prepared the report or who directly supervised

preparation of the report, certifying the accuracy of the information contained in the report; and

(2) A statement signed by the facility owner/~~operator~~ that the report is complete and accurate.

(3) A completed UST Closure Assessment Report Checklist.

d. The owner/~~operator~~ shall submit the Closure Assessment Report to the Director within 30 days after the date of the UST closure; or as specified by the Director.

e. All reports submitted to the Department per the requirements of this Section must be submitted in both hardcopy and electronic format (as specified by the Department).

11. In response to conditions identified by a representative of the Department or reported to the Department, the Director may require one or more of the following actions during the UST closure:

a. The collection and analysis of soil samples in and around the UST excavation zone and/or product pipeline trench conducted ~~done~~ in accordance with standard EPA methods and protocols or other methods approved by the Director;

b. Excavation and stockpiling of contaminated soil from in and around the UST or product pipeline excavation for offsite disposal; and/or

c. Free product removal or other remedial activities applicable under §§ 1.14(E) and ~~1.14~~(F) of this Part, the RI DEM - "Oil Pollution Control Regulations", Subchapter 25 Part 2 of this Chapter, or other state and federal statutes, Rules or Regulations.

12. When required by the Director, the owner/~~operator~~ of a UST system permanently closed before December 22, 1988 shall assess the excavation zone in accordance with this Section if, in the judgment of the Director, releases from the UST pose a potential threat to human health or the environment.

13. Certificate of Closure

a. Following DEM inspection of a closure or receipt of a Closure Assessment Report that satisfies the Requirement in ~~§ 1.15(D)(10)~~ of this Part Rule 13.11, the Director shall:

(1) Issue a Certificate of Closure; or

(2) Require that additional actions be taken in accordance with ~~—§~~ 1.14 of this Part if there is evidence of a release.

- b. All Certificates of Closure issued under the "Emergency Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials", adopted 9 October, 1984 shall remain in full force and effect provided that the owner/~~operator~~ submit a written certification in accordance with § 1.17 of this Part.
- c. The Director shall not issue a Certificate of Closure until it is satisfied that all residues and contaminated soil generated as a result of the closure have been properly transported to an authorized facility and all investigatory and remedial actions have been completed in accordance with § 1.14 of this Part.

1.16 Approval of Tank and/or Line Tightness Tests, Leak Detection Methods and Licensing Requirements

A. Applicability

1. ~~_____~~ This Section applies to all companies and persons who conduct tightness or leak detection tests on underground storage tanks and product pipelines located in Rhode Island, and the manufacturer or developer of the tightness tests.

B. Prohibition

- 1. No person shall conduct ~~tightness-tightness or interstitial~~ testing on underground storage tanks or tank components in Rhode Island except as in compliance with the licensing and other provisions of this Section.
- 2. A licensed tester shall not authorize any other person to conduct tightness or interstitial testing under his/her license.
- 3. A licensed tester cannot transfer his/her license to any person.
- 4. Licensed testers shall perform tightness or interstitial tests in accordance with protocols provided by the developer or manufacturer of the testing equipment, and in accordance with related protocols provided by the most current publication ~~of~~ the National Work Group on Leak Detection Evaluations.
- 5. All tightness and interstitial testing methods must be approved by the Director prior to use.

C. Approval of Tank and Line Tightness and Interstitial Test Methods

- 1. The Department shall maintain a list of tank and line tightness test methods that have been approved for use in Rhode Island.

2. To obtain approval of a tank and/or line tightness test method, the manufacturer or developer of the method shall submit to the Director:
 - a. The protocols, operating manuals, performance data, and other pertinent information that demonstrates by clear and convincing evidence that the leak detection method satisfies the requirements of a tightness test as defined in § 1.5 of this Part, and 40 C.F.R. § 281.33 and the method can be performed reliably and effectively;
 - b. The entire third party evaluation reports conducted in accordance with the Standard Test Procedures for Evaluating Leak Detection Methods issued by the EPA. These reports must be complete and include all data, method description reports, test results, reports and other information required in the above-referenced EPA procedures;
 - c. Verification that the method is included in the most current publication of the National Work Group on Leak Detection Evaluations;
 - d. Verification that the method requires certification of the individual testers who perform the entire test, and a detailed description of the certification procedure;
 - e. Agreement from the manufacturer or distributor to provide certified training in the approved method to DEM employees, at no cost to the Department.

D. Licensing Procedures for ~~Tightness~~ Testers

1. Any individual wishing to be licensed to conduct tightness or interstitial tests in Rhode Island shall submit a completed application to the Director which includes, but may not be limited to, the following:
 - a. A copy of a valid certificate issued by the manufacturer of the equipment of a DEM accepted ~~tightness~~ test method that indicates that the applicant has successfully completed all training courses pertaining to the operation of the test equipment;
 - b. Identification of the owner(s) of the equipment to be used by the applicant to perform tests; and identification of who has and will maintain and calibrate the equipment;
 - c. A copy of a certificate of liability insurance specifying tightness-testing or interstitial-testing activities for the entity which owns or operates the equipment which provides for coverage of bodily injury of at least \$100,000 per person and an aggregate of \$300,000, per occurrence, and provides for property damage of at least \$50,000 per accident with an aggregate of \$100,000;

~~A description of the applicant's relevant experience; and~~

- d. An initial application license fee of \$100.00. Checks or money orders shall be made payable to "Treasurer, State of Rhode Island, Water and Air Protection Fund".
 2. All tightness and/or interstitial tester licenses shall expire annually on September 30, and it shall be the responsibility of each licensed tester to renew that license in accordance with the provisions of this Section.
 3. At least ~~thirty (30)~~ days prior to the expiration of a license, a tester shall submit a complete license renewal application on forms as provided by DEM, and a renewal fee of \$100.00.
 4. An application is considered submitted if it includes all of the required information and fees. A ~~tightness~~ tester who fails to submit a complete application at least ~~thirty (30)~~ days prior to the expiration of his/her license, shall be subject to a late fee charge of \$25.00. Should the processing time of an untimely renewal application extend beyond the expiration date of the previous license, the tester may not conduct any tightness tests in Rhode Island until after the license renewal is issued.
 5. Upon review and approval of a license application, either new or renewed, the Director shall issue a license.
 6. A licensee shall notify the Director of any change in his or her business address within ~~thirty (30)~~ days of such change.
- E. Licensing Procedures for ~~Tightness~~ Testing Businesses
1. Any business who employs or subcontracts licensed testers to conduct tank and/or piping ~~tightness~~ tests in Rhode Island are required to submit a completed application for a tank ~~tightness~~ testing business license to the Department which includes, but is not limited to, the following:
 - a. A complete list of all tank tightness and/or interstitial testers that the business employs or subcontracts to conduct tank ~~tightness~~ testing in Rhode Island;
 - b. Identification of who owns the testing equipment used by the testers, identification of who maintains and calibrates the testing equipment, and identification of the testing equipment by the Manufacturer, Model number, Serial number, etc.;
 - c. A copy of a certificate of liability insurance specifying tank tightness or interstitial testing activities for the entity which owns or operates the equipment which provides for coverage of bodily injury of at least \$100,000 per person and an aggregate of \$300,000, per occurrence, and

provides for the property damage of at least \$50,000 per accident with an aggregate of \$100,000.

2. All ~~tightness~~ testing business licenses shall expire annually on September 30, and it shall be the responsibility of each licensed testing business to renew that license in accordance with the provisions of this Section.
3. At least ~~thirty (30)~~ days prior to the expiration of a license, a testing business shall submit a complete license renewal application on forms as provided by DEM.
4. Should the processing time of an untimely renewal application extend beyond the expiration date of the previous license, testers employed by the business may not conduct any ~~tightness~~ tests in Rhode Island until after the license renewal is issued.
5. A UST system ~~tightness~~ testing business shall notify the Director of any change in his or her business address within ~~thirty (30)~~ days of such change.

F. Suspension or Revocation of License:

1. Whenever the Director has reasonable grounds to believe that a licensed ~~tightness~~ tester or testing business has not acted in compliance with these regulations or has conducted ~~tightness~~ tests in such a way as to violate R.I. Gen. Laws Chapters 23-19.1, 42-17.1 or 46-12, the Director may suspend or revoke that person's ~~tightness~~ testing license. A suspension or revocation of a ~~tightness~~ testing license may also include, but not be limited to, the following:
 - a. An assessment of penalties;
 - b. An order directing the tester and/or testing business to submit documentation pertaining to his/her past UST testing activities; and
 - c. An order directing the tester and/or testing business to arrange for another licensed third party tester to re-test certain named USTs or UST systems at the expense of the alleged violator.
2. The Director shall revoke a ~~tightness~~ testing license whenever it is determined that the tester or testing business did not act in compliance with these regulations or conducted ~~tightness~~ tests in violation of R.I. Gen. Laws Chapters 23-19.1, 42-17.1 or 46-12. The Director reserves the right, upon notice to the alleged violator, to upgrade any license suspension to a license revocation based upon newly discovered information.

G. Procedure for Suspension and Revocation

1. Upon learning of reasonable grounds to believe that a violation has occurred, the Director shall notify the tester and/or testing business, by certified mail, of the

facts and/or conduct warranting the intended suspension or revocation. Such notice shall be for the purpose of allowing the tester and/or testing business an opportunity to show compliance with all lawful requirements for the retention of his/her license.

2. If the tester and/or testing business fails to show compliance with the requirements for retaining his/her license to the satisfaction of the Director, then the Director shall issue a Notice of Suspension or Revocation enumerating the facts or conduct warranting the suspension or revocation and the statutes and/or regulations violated.
3. All Notices of Suspension or Revocation shall be forwarded to the licensee by certified mail or served upon the licensee in accordance with the Rhode Island Superior Court Rules of Civil Procedure.

H. Requests for Hearings

1. Persons wishing to request a hearing in regard to the suspension or revocation of a ~~tightness~~ testing license may do so by filing a hearing request with the Department's Administrative Adjudication Division in accordance with the "Administrative Rules of Practice and Procedure for the Department of Environmental Management" Part 20-00-1 of this Title ~~Administrative Adjudication Division for Environmental Adjudication Division~~ within ~~ten (10)~~ 30 days of the licensee's receipt of the Notice of Suspension or Revocation. Whenever a hearing request is not filed in a timely fashion, the Notice of Suspension or Revocation shall automatically become a Compliance Order of the Department enforceable in Superior Court.
2. Upon upholding by AAD of the suspension or revocation of a license, and unless appealed to Superior Court, the Director shall notify the manufacturer of the ~~tightness~~ testing equipment of the suspension or revocation and request concurrent action.

1.17 Signatories to Registration and Closure Applications

A. Signatures

1. No person may sign an application for a Certificate of Registration or Closure except in the manner set forth in this Part:
 - a. For a corporation: The application shall be signed by a responsible corporate officer. For the purpose of this Part, a responsible corporate officer means:
 - (1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or ~~decision making~~ decision-making functions for the corporation; or

- (2) The manager of one or more facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$21 million (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (3) DEM does not require specific assignments or delegations of authority to responsible corporate officers identified in § 1.17(A)(1)(a) of this Part. The DEM will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under §§ 1.17(A)(1)(a) or (b) of this Part ~~or (2)~~ rather than to specific individuals.
- b. For a partnership, limited partnership or sole proprietorship; by a general partner or the proprietor, respectively;
 - c. For a municipality, state, federal, or other public agency; by either a principal executive officer or ranking elected official. For purposes of this Section, a principal executive officer of a federal agency includes:
 - (1) The chief executive officer of the agency, or
 - (2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
 - d. For a military installation; by the Installation Commander of a rank of 06 or higher, if the installation employs more than 250 persons and authority to sign permit applications has been assigned or delegated to the Installation Commander in accordance with applicable Department of Defense (DOD) procedures. If an Installation Commander does not meet these requirements, the permit application must be signed by a superior officer who meets the requirements. In addition, where a tenant is present on the installation and has authority or responsibility for any aspect of the regulated activity, the Tenant Commander (rank of 06 or higher) must also sign the application. The Tenant Commander must also employ more than 250 persons and have been assigned or delegated authority to sign permit applications in accordance with applicable DOD procedures. Again, if the Tenant Commander does not meet these requirements, the permit application must be signed by a superior officer meeting the requirements.

B. Reports

1. All reports required by this Part and other information requested by the Director shall be signed by a person described in § 1.17(A) of this Part, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in § 1.17(A) of this Part;
 - b. The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - c. The written authorization is submitted to the Director.

C. Changes to Aauthorization

1. ——— If an authorization under §§ 1.17(A) or (B) of this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this Section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification

1. All documents required to be signed in accordance with § 1.17(A) of this Part shall contain the following certification:
 - a. "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1.18 Transfer of Certificates of Registration and Closure

A. Prohibition

1. No person shall transfer ownership of a UST facility or facility component without ~~prior~~ notification to the Director as provided in § 1.18(B) of this Part.

B. Transfer of Registration Certificates

1. DEM must be notified of any change in UST facility, UST system, or property ownership within seven days of the transfer.
 2. The individual, group, or entity selling or otherwise transferring the UST facility, UST system, or property must complete and submit the form titled "Notification of Intent to Transfer UST Registration" and submit to DEM within seven days of selling, gifting, or otherwise transferring ownership of the UST Facility, UST System, and/or property.
 3. The individual, group, or entity assuming ownership or responsibility of the UST facility, UST system, or property must complete and submit the form titled "Transfer of Ownership and UST Registration" and submit to DEM within seven days of assuming ownership or responsibility for the UST facility, UST system, or property.
 4. Failure of the registered UST owner to promptly notify DEM of any change in ownership may result in the individual, group, or entity being considered a responsible party even if the UST system was sold, transferred, or gifted.
- C. UST Registration fees and any applicable late fees are transferred upon sale, transfer, or change in ownership of the UST system and/or facility and will become the responsibility of the new owner or responsible party.
- D. ~~An owner of a facility may only transfer a Certificate of Registration to a new owner after providing written notification of the proposed transfer to the Director by certified mail at least thirty (30) days prior to the proposed "transfer date" and shall include the following information:~~

~~Name, registration number and address of the Facility;~~

~~Name and address(es) of the current owner(s) and operator(s);~~

~~Names and address(es) of the proposed owners(s) and operator(s);~~

~~Names and addresses of the persons upon whom legal process can be served for both the present and proposed owners(s) and operator(s);~~

~~A notarized statement, signed by a duly authorized officer or agent of the new owner/operator stating that he/she:~~

~~Has read the original application for a Certificate of Registration or Closure and~~

~~Believes, to the best of his or her knowledge, that there has been no substantial modification in the operations of the Facility since the Certificate was issued; and~~

~~Has included a description of all the changes that have occurred since the Certificate was issued.~~

~~A proposed transfer date on which the new owner will assume the Certificate and all accompanying responsibility.~~

~~Accompanying the notification from the current owner shall be payment of any due or past due registration and/or late fees pertaining to the facility.~~

~~The Director shall notify the existing certificate holder and the proposed new certificate holder, within thirty (30) days of receipt of notice of proposed transfer, in the event that additional information is needed or of an intent to modify, revoke or revoke and reissue the certificate. If the applicant does not receive such notice, the transfer is effective on the date specified in the notice provided to the Director pursuant to Rule 16.02 (A).~~

Transfer of Records

1. _____ The existing Certificate holder shall deliver to the new owner or operator all documents and information related to the UST, facility or system, including, but not limited to, all records required to be maintained in § 1.13 of this Part.

1.19 Holding Tanks

A. Applicability

1. _____ Except as provided by § 1.4(D) of this Part, all owners and operators of UST systems used to collect and store/contain the discharges of non-sanitary wastewaters and other pollutants shall be subject to this Rule. containing petroleum regulated substances or hazardous materials substances from floor drains or other piping outlets shall be subject to this Section.

B. Registration

1. Existing holding tanks are required to have been registered prior to July 1, 1994. The owner/~~operator~~ of new and replacement holding tanks installed on or after July 1, 1994 are required to apply for a certificate of registration from the Director before commencing installation of the holding tank.

C. Application for Registration

1. _____ To apply for a certificate of registration, the facility owner/~~operator~~ shall complete, certify, and submit to DEM, application forms which shall be available from the Department.

D. Minimum Requirements for Existing Holding Tank Systems

1. The owner/~~operator~~ of a holding tank in operation prior to the commencement of these regulations shall meet the following requirements:
 - a. Verify that the holding tank and associated piping are made of or lined with materials that are compatible with the material(s) being stored.

- b. Verify that the holding tank and associated piping are solid, non-leaching, and in good operational condition.
- c. Obtain written approval from the Director prior to any upgrade of a holding tank and its associated piping.
- d. All holding tanks are required to be maintained in accordance with § 1.19(G) of this Part.

E. New Holding Tank System Requirements:

1. Prohibitions

- a. The installation of new holding tanks wherein the groundwater is designated as a wellhead protection area for a community well, pursuant to R.I. Gen. Laws Chapter 46-13.1, is prohibited. However, facilities where the USTs have been registered prior to the effective date of these regulations and where the USTs have not been abandoned or removed from the ground for more than 180 days shall be permitted to be replaced with a tank of equivalent size and substance stored and in accordance with the provisions of these regulations.
- b. The installation of bare steel or metal holding tanks is prohibited.
- c. In accordance with the RI DOH "Rules and Regulations Pertaining to Public Drinking Water" ~~(R46-134-DWQ)~~, the installation of a UST within 200 feet of a public dug well or bedrock well or within 400 feet of a gravel-developed well is prohibited.
- d. No person shall commence construction of a new holding tank system or replacement holding tank system, and no modification may be made to any holding tank facility for which an application for a certificate of registration is required, without prior written notification to and approval by the Director.

2. Compatibility

- a. _____ All new or replacement holding tanks and/or piping systems shall be made of or lined with materials that are compatible with the substance(s) stored. The owner/operator shall not introduce, or allow to be introduced, any material into a holding tank system that is incompatible with the holding tank system.

3. Tanks - Design and Manufacturing Standards

- a. _____ All new holding tanks installed in Rhode Island shall provide for secondary containment of the tank and associated piping, and shall be

constructed in accordance with the requirements of § 1.11(E) of this Part.
~~one of the national codes and requirements listed below:~~

- a. ~~— All new and replacement holding tanks shall be of double-walled construction.~~
- b. ~~— All holding tanks constructed of fiberglass-reinforced plastic shall comply with one of the following national codes, as amended:~~
 - (1) ~~— Underwriter's Laboratories Standard 1316, April 2, 1996: "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols and Alcohol-Gasoline Mixtures," 1.3 of this Part 2nd Edition~~
 - (2) ~~— Underwriters Laboratories of Canada ULC-S615-1998: "Standard for Underground Reinforced Plastic Tanks."~~
- c. ~~— All holding tanks constructed of steel shall be cathodically protected and shall comply with one of the following national codes, as amended:~~
 - (1) ~~— Underwriters Laboratories of Canada CAN/ULC-S603-1992: "Standard for Underground Steel Tanks," and CAN/ULC-S603.1-1992: "Standard for Galvanic Corrosion Protection Systems for Underground Steel Tanks", and CAN4-S631-1984(R1998): "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems;"~~
 - (2) ~~— National Association of Corrosion Engineers Standard RP0285-2002: "Corrosion Control of Underground Storage Tank Systems by Cathodic Protection" and Underwriters Laboratories Standard 58, December 13, 1996: "Standard for Steel Underground Tanks for Flammable and Combustible Liquids,"~~
 - (3) ~~— Steel Tank Institute "sti-P₃, February 2010: "STI-P3 Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks" and Underwriters Laboratories Standard 58, December 13, 1996: "Standard for Steel Underground Tanks for Flammable and Combustible Liquids."~~
- d. ~~— All holding tanks constructed of a steel-fiberglass-reinforced plastic composite, steel-high density polyethylene (HDPE), and steel-polyurethane systems shall comply with the Underwriters Laboratories Standard 1746, January 2007: "Standard for External Corrosion Protection Systems for Steel Underground Tanks," as amended, Underwriters Laboratories Standard 58, December 13, 1996: "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," as amended, and one of the following codes: Steel Tank Institute STI F894, February 2010: "ACT-100 Specification for External Corrosion Protection of FRP Composite Steel USTs," as amended, Steel Tank Institute STI F922, February 2010: "Specification for Permatank," as amended, or Steel Tank Institute STI F961, February 2010: "ACT-100-U Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks," as amended.~~

4. Manufacturer's Test

- a. _____ Prior to installation, all new and replacement holding tanks shall be factory tested at a minimum of five ~~(5)~~ pounds per square inch gauge and shall be guaranteed tight by the manufacturer. This guarantee shall be filed with the Director at the time of installation application.

5. Installation Standard:

- a. All tanks, piping, and other related facility components shall be installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory ~~as listed in Appendix B~~ and in accordance with the manufacturer's instructions.
- b. The local city/town building official shall be notified prior to the commencement of installation.

6. Tightness Testing Upon Installation

- a. _____ All new and replacement tanks and/or lines shall be tightness tested upon completion of installation and in accordance with _____ § 1.10(H) of this Part. ~~Rule 8.10.~~ The results of this initial tightness test shall be submitted to the Director within 15 calendar days of test completion or in the event of a leak, in accordance with § 1.14 of this Part. No further tightness testing will be required beyond installation, unless the Director has reason to believe the holding tank or its secondary containment has been breached.

7. Piping - Design Construction and Installation

- a. All new or replacement underground piping that ~~routinely~~ contain regulated substances, including fittings and connections, shall be designed and constructed in accordance with the following:
- (1) Fiberglass reinforced plastic piping and nonmetallic flexible piping shall be made of materials listed by Underwriters Laboratories (UL) or Underwriters Laboratories of Canada (ULC); and be equipped with secondary containment.
 - (2) All steel or metal piping which ~~routinely~~ contains a regulated substance shall be equipped with secondary containment, and all such piping that is in contact with the ground shall be cathodically protected with an impressed current system. All cathodic protection systems shall be designed, installed, operated and maintained in accordance with the national codes of practice listed in § 1.11(E)(1)(c) of this Part. ~~sited in Rule 9.05-(C).~~

8. Overfill Prevention Equipment

- a. _____ All new and replacement holding tank systems shall be provided with equipment to prevent overfilling during normal operation.

F. Facility Modification

1. _____ No substantial modification may be made to any holding tank facility for which an application for a certificate of registration is required without prior written notification to and approval by the Director.

G. Maintenance Requirements

1. All wastes shall be removed from the holding tank as necessary and in accordance with appropriate state, local, and federal Rules and Regulations.
2. Records of all waste removals must be maintained on site for a minimum of five years.
3. All tanks and associated piping must be maintained in accordance with manufacturer's standards.
4. On a yearly basis, the space between the secondary containment and the holding tank shall be physically monitored to verify that neither the tank nor the secondary containment have been breached. If either has been breached, the Director shall be notified in accordance with § 1.14(D) of this Part. ~~Rule 12.04 of these regulations.~~
5. Upon reasonable notice, the owner/operator shall make available for inspection by the Director, any records required under this subsection.

1.20 Variances

A. Variance Requests

1. Any owner/operator of a facility, or person subject to these regulations may submit a written request to the Director for a variance from some or all provisions of these regulations. Such request for a variance must, at the minimum, contain the following:
 - a. The name and address of the facility owner/operator, and/or person requesting the variance;
 - b. The name, location, and registration number of the facility for which the owner/operator seeks a variance, if applicable;
 - c. Identification of the specific ~~r~~Rule or ~~r~~Rules from which a variance is requested;
 - d. A statement of the reasons for which the facility owner/operator and/or person seeks a variance. This statement shall specify the reasons that

the facility owner/operator and/or person is unable to comply with this Part, why a variance is necessary, and the reasons why hardship is alleged. The person seeking the variance should separately and by number list each reason and any other mitigating factor he/she believes the Director should consider;

- e. An explanation that the alternative procedures requested are substantially equivalent to the Rules and Regulations herein in achieving protection of the public health and the environment; and
- f. The signature of the person requesting the variance.

B. Variance Decisions:

- 1. The owner/operator and/or person shall have the burden of proving by clear and convincing evidence that a variance should be granted because alternative design, operating standards or procedures are substantially equivalent to the regulations and will have no adverse effect on public health and the environment.
- 2. If the Director determines that there is widespread public interest or that the variance request raises major issues that could affect other facilities, then the Director may schedule a public hearing to solicit public comment prior to rendering a decision on the variance request.
- 3. The Director's decision to grant or deny a variance shall be in writing and may, as a condition of granting the variance, impose appropriate requirements necessary to protect the public health and environment.

C. Appeal of Variance Denials

- 1. _____ Any person affected by the grant or denial of a variance request may, in accordance with the Administrative Rules of Practice and Procedure for the ~~Department of Administrative Adjudication Division for~~ Environmental Management, Part 20-00-1 of this Title, file an appeal to review the initial decision. All appeals must be received by the Administrative Adjudication Division within ~~ten (10)~~ 30 days of receipt of the denial of the variance.

1.21 Appeals

Any person affected by a decision of the Director pursuant to these regulations may, in accordance with Administrative Rules of Practice and Procedure for the Department of Environmental Management, Part 20-00-1 of this Title, file a claim for an adjudicatory hearing to review the decision. The party appealing a Department decision bears the burden of proving that their application or actions comply with all requirements of the Rules and Regulations herein.

1.22 Penalties

The Director shall assess all penalties for violation of these regulations in accordance with the provisions of R.I. Gen. ~~Rhode Island General~~ Laws Chapters 46-12, 42-17.1, 42-17.6 and 23-19.1 and the "Rules and Regulations for Assessment of Administrative Penalties", Part 130-00-1 of this Title.

1.23 Severability

~~If any provision of these Rules and Regulations, or the application thereof to any person or circumstances, is held invalid by a court of competent jurisdiction, the validity of the remainder of the Rules and Regulations shall not be affected thereby.~~

1.24 Superseded Rules and Regulations

~~On the effective date of these Rules and Regulations, all previous Rules and Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials shall be superseded except for the purposes of Department enforcement actions. Any enforcement action shall be governed by the Rules and Regulations in effect at the time the alleged violations occurred.~~

1.25 Effective Date

~~The foregoing "Rules and Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials", after due notice and hearing, are hereby adopted and filed with the Secretary of State, this ____ day of _____, 2017, to become effective twenty (20) days thereafter, in accordance with the provisions of R.I. Gen. Laws § 42-35. Chapter 42-35 of the General Laws of Rhode Island, 1956, as amended.~~

Appendix A: Definition of Hazardous Substance

~~Hazardous substance, as defined by section 101 (14) of CERCLA, means (a) any substance designated pursuant to section 311(b)(2)(A) of the CWA; (b) any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA; (c) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress); (d) any toxic pollutant listed under section 307(a) of the CWA; (e) any hazardous air pollutant listed under section 112 of the Clean Air Act; and (f) any imminently hazardous chemical substance or mixture with respect to which the Administrator of EPA has taken action pursuant to section 7 of the Toxic Substances Control Act. The terms do not include petroleum, including crude oil or any fraction~~

~~thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (a) through (f) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).~~

~~APPENDIX B: APPLICABLE NATIONAL CODES OF PRACTICE~~

~~Subject to Change Through Written DEM Policy Documents Following Notice and Hearing In Accordance With RI APA R.I.G.L. 42-35-3~~

~~Installation:~~

~~API RP Publication 1615, 1996~~

~~"Installation of Underground Petroleum Storage Systems," Recommended Practice, 5th Edition~~

~~NFPA 31, 2006~~

~~"Standard for the Installation of Oil-Burning Equipment"~~

~~PEI/RPIOO-2005~~

~~"Recommended Practices for Installation of Underground Liquid Storage Systems"~~

~~PEI/RP-1000-09(Draft)~~

~~"Recommended Practices for the Installation of Marina Fueling Equipment~~

~~UST Design and Manufacturing Standards:~~

~~STI sti-P3, February 2010~~

~~"STI-P3 Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks"~~

~~STI F894, February 2010 "ACT-100 Specification for External Corrosion Protection of FRP Composite Steel USTs"~~

~~STI F961, February 2010~~

~~"ACT-100-U Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks"~~

~~STI F922 February 2010~~

~~"Specification for Permatank".~~

~~UL Standard 58, December 13, 1996~~

~~"Standard for Steel Underground Tanks for Flammable and Combustible Liquids." 9th Edition~~

~~UL Standard 971, July1, 2005~~

~~"Standard for Nonmetallic Underground Piping for Flammable Liquids," Revised~~

~~UL Standard 97-1A, October 18, 2006~~

~~"Standard for Metallic Underground Fuel Pipe"~~

~~UL Standard 1316, April 2, 1996~~

~~"Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures." 2nd Edition~~

~~UL Standard 1746, January 17, 2007~~

~~"Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks," 3rd Edition~~

~~Corrosion Protection:~~

~~API RP1632, 1996~~

~~"Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," 3rd Edition~~

~~NACE RP-0169-2007~~

~~"Control of External Corrosion on Underground or Submerged Metallic Piping Systems"~~

~~NACE RP0285-2002~~

~~"Corrosion Control of Underground Storage Tank Systems by Cathodic Protection"~~

~~STI R972, January 2006~~

~~"Recommended Practice for the Addition of Supplemental Anodes to sti-P3 USTs"~~

~~Also UL 1746 (See Above)~~

~~Lining:~~

~~API RP 1631, 2001~~

~~"Interior Lining and Periodic Inspection of Underground Storage Tanks," 5th Edition~~

~~NLPA Standard 631, 1991~~

~~"Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks"~~

~~General:~~

~~API RP 1621, 2001 "Bulk Liquid Stock Control at Retail Outlets" 5th Edition~~

~~API RP 1635, 1987~~

~~"Management of Underground Petroleum Storage Systems at Marketing and Distribution Facilities, 2nd Edition~~

~~API RP 1637, 2007~~

~~"Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at~~

~~Gasoline Dispensing Facilities and Distribution Terminals," 3rd Edition~~

~~NEPA 30, 2008~~

~~"Flammable and Combustible Liquids Code"~~

~~NEPA 30A, 2008~~

~~"Code for Motor Fuel Dispensing Facilities and Repair Garages"~~

~~NEPA 31, 2006~~

~~"Standard for the Installation of Oil-Burning Equipment"~~

~~NEPA 329, 2010 "Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases"~~

~~NEPA 385, 2007~~

~~"Standard for Tank Vehicles for Flammable and Combustible Liquids"~~

~~PEI/RP500-05 "Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment"~~

~~PEI/RP900-08~~

~~"Recommended Practices for the Inspection and Maintenance of UST Systems"~~

~~Closure:~~

~~API RP 1604, 1996 "Closure of Underground Petroleum Storage Tanks," 3rd Edition~~

~~API RP 2015, 2004~~

~~"Safe Entry and Cleaning of Petroleum Storage Tanks," 6th Edition~~

~~APPENDIX C: INSTALLATION CHECKLIST AND CERTIFICATION FORM~~

~~STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS~~

~~Department of Environmental Management~~

~~Office of Waste Management~~

~~UNDERGROUND STORAGE TANK SECTION~~

~~235 Promenade Street~~

~~Providence, RI 02908-5767~~

~~(401) 222-2797~~

~~RI DEM UST FACILITY ID NO. _____~~

~~CERTIFICATE OF INSTALLATION OR MODIFICATION OF UST~~

I, _____, hereby certify that on _____, _____, I performed certain installation or modification work on underground storage tanks, piping, and/or other related UST facility components located at:

I further certify that:

(1) All work was performed in accordance with: all applicable national codes of practice as listed in "Appendix B" of the Regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials (the "UST Regulations"); the manufacturer's instructions; and the prior written approval of DEM.

~~(2) All work specified in the manufacturers installation checklist has been completed. (A copy of the installation checklist, signed by the contractor submitting this Certificate, must be attached hereto.)~~

~~(3) I am certified or licensed as may be required by the R.I. Department of Labor, Division of Professional Regulation. (See R.I. General Laws Chapter 28-27 regarding installation of commercial gasoline or diesel UST systems.)~~

~~(4) The City/Town building official was notified prior to the commencement of the installation or modification work.~~

~~(5) Compliance with all proper installation procedures is assured by at least one of the following (check all that apply):~~

~~☐ I am certified by the appropriate equipment manufacturers.~~

~~☐ The work performed was inspected and approved by, a registered professional engineer in the State of Rhode Island having education and experience with UST equipment installation or modification.~~

~~☐ The work was performed in compliance with the following DEM approved method(s) for assuring proper installation or modification:~~

~~(A copy of DEM's written approval of the above methodology must be attached hereto.)~~

INSTALLER'S CERTIFICATION

~~I hereby certify and attest that the information provided herein is true and accurate. I understand that the provision of false or misleading information could subject me to civil and/or criminal penalties, loss of licensure and/or imprisonment as may be provided by statute or regulation.~~

Signature _____ Date _____

Name (Print): _____

Title : _____

Business Name : _____

Address : _____

Phone Number : _____

OWNER'S CERTIFICATION

~~I hereby certify that I am the registered owner of the above-referenced facility and/or USTs and that the work described herein was undertaken at my direction.~~

Signature _____ Date _____

Name (Print) : _____

Title : _____

Business Name : _____

Address : _____

Phone Number : _____

Appendix D: Manual Tank Gauging Record

Circle your tank size, test duration, and weekly/monthly standards in the table below:

MONTH _____ YEAR _____
TANK IDENTIFICATION: _____
PERSON COMPLETING FORM: _____
FACILITY NAME: _____
RI DEM UST FACILITY ID #: _____

Tank Size	Minimum Duration Of Test	Weekly Standard (1 test)	Monthly Standard (4-test average)
up to 550 gallons	36 hours	10 gallons	5 gallons
551-1,000 gallons (also requires periodic tank tightness testing)	36 hours	13 gallons	7 gallons
1,001-2,000 gallons (also requires periodic tank tightness testing)	36 hours	26 gallons	13 gallons

Compare your weekly readings and the monthly average of the weekly readings with the standards shown in the table on the left. If the calculated change exceeds the weekly standard, the UST may be leaking. Also, the monthly average of the 4 weekly test results must be compared to the monthly standard in the same way.

If either the weekly or monthly standards have been exceeded, the UST may be leaking. As soon as possible, call RI DEM at (401) 222-2797 to report the suspected leak and get further instructions.

Start Test (month, day, and time)	First Initial Stick Reading	Second Initial Stick Reading	Average Initial Reading	Initial Gallons (convert inches to gallons) [a]	End Test (month, day, and time)	First End Stick Reading	Second End Stick Reading	Average End Reading	End Gallons (convert inches to gallons) [b]	Change In Tank Volume In Gallons + or (X) [aXb]	Test Passed (c) YES or NO
AM/PM					Date: Time: AM/PM						Y
AM/PM					Date: Time: AM/PM						Y
AM/PM					Date: Time: AM/PM						Y
AM/PM					Date: Time: AM/PM						Y
To see how close you are to the monthly standard, divide the sum of the 4 weekly readings by 4 and enter result here >											Y

KEEP THIS PIECE OF PAPER ON FILE FOR AT LEAST 3 YEARS