State of Connecticut
Regulation of
Department of Energy and Environmental Protection
Concerning
Underground Storage Tank Regulations

Section 1. Section 22a-6b-8(c) of the Regulations of Connecticut State Agencies is amended by adding subdivision (4) as follows:

(NEW) (4) Underground Storage Tank Violations.

For each distinct violation of chapter 446k of the Connecticut General Statutes, or of any provision of section 22a-449(d) et seq. of the Regulations of Connecticut State Agencies, or of an order or permit adopted, administered or issued thereunder by the commissioner of Energy and Environmental Protection, the gravity-based penalty component shall be determined using Table 4A.

Table 4A
Penalty Schedule for Underground Storage Tank (UST) Violations

Type of Violation	**Penalty**
Failure to submit a completed underground storage facility annual notification in violation of section 22a-449(e) of the Connecticut General Statutes or notify the commissioner within 30 days of any change to any information in a prior notification submitted about a regulated UST system or of the installation of an UST system in violation of 22a-449(d)-114 of the Regulations of Connecticut State Agencies.	$250 per violation
Failure to submit an underground storage facility notification fee in violation of section 22a-449(e) of the Connecticut General Statutes or to submit an UST system installation fee in violation of section 22a-449(h) of the Connecticut General Statutes.	$250 per violation
Submission of a false statement in a Connecticut General Statutes section 22a-449(e) underground storage facility notification or other notification required under section 22a-449(d)-114 of the Regulations of Connecticut State Agencies in violation of section 22a-6(a)(8) of the Connecticut General Statutes.	$1,000 per violation
Failure to maintain a disabling device on dispensers and fill pipes in violation of section 22a-449(g) of the Connecticut General Statutes.	$1,000 per violation
Failure to post Operator Response Guidelines at the site where the UST system is located in violation of section 22a-449(d)-103 of the	$100 per underground storage facility

Regulations of Connecticut State Agencies or to post proper Class C operator training records at the site where the UST system is located in violation of section 22a-449(d)-108 of the Regulations of Connecticut State Agencies.	
Failure to report a suspected release from a regulated UST or UST system within 24 hours in violation of section 22a-449(d)-105 of the Regulations of Connecticut State Agencies or a confirmed release from a regulated UST or UST system within one hour in violation of section 22a-449(d)-106 of the Regulations of Connecticut State Agencies.	$500 per UST or UST system
Failure to designate and maintain Class A, B, and C operator in violation of section 22a-449(d)-108 of the Regulations of Connecticut State Agencies.	$250 per violation
Failure to maintain proper Financial Responsibility records at the site where the UST system is located in violation of section 22a-449(d)-109 of the Regulations of Connecticut State Agencies.	$250 per record
Failure to maintain proper Financial Responsibility coverage in violation of section 22a-449(d)-109 of the Regulations of Connecticut State Agencies.	$1,000 per violation
Failure to remove regulated substances from an UST system that is temporarily taken out of service in violation of 22a-449(d)-110 of the Regulations of Connecticut State Agencies.	$500 per violation
The use or operation of an UST system beyond its life expectancy or the failure to permanently close any such UST system prior to the last day of its life expectancy in accordance with the closure requirements specified in section 22a-449(d)-107 of the Regulations of Connecticut State Agencies, in violation of 22a-449(d)-111 of the Regulations of Connecticut State Agencies.	$500 per UST system for the first 12 months beyond life expectancy, then $1,000 per UST system for each additional year beyond life expectancy
Failure to maintain the following records at the site where the UST system is located in violation of section 22a-449(d)-114 of the Regulations of Connecticut State Agencies: spill prevention equipment test records; proper UST closure documentation; records of repairs; completed monthly visual inspection records; or proper release detection compliance records.	$250 per required record
Failure to submit a properly completed Certificate of Installation in violation of section 22a-449(d)-114 of the Regulations of Connecticut State Agencies.	$250 per required record

Sec. 2. Section 22a-449(d)-1 of the Regulations of Connecticut State Agencies is amended as follows:

Sec. 22a-449(d)-1. Control of the nonresidential underground storage and handling of oil and petroleum liquids

(a) **[Definitions, applicability and purpose] Applicability and partial exemptions**

(1) Applicability

Owners and operators of the following types of [facilities, as defined in subdivision (2) of this subsection,] UST systems shall comply with the requirements of this section:

(A) [Facilities used for storing heating oil for consumptive use on the premises where stored;] UST systems used solely for storing heating oil for heating on the premises where stored; and

(B) [Farm facilities of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.] Farm UST systems or former farm UST systems of 1,100 gallons or less capacity used for storing motor fuel that is not re-sale.

(2) [As used in this section: Definitions

"Abandoned" means rendered permanently unfit for use.

"Abnormal loss or gain" means an apparent loss or gain in liquid exceeding 0.5 percent of (1) the volume of product used or sold by the owner or operator during any seven consecutive day period, or (2) the volumetric capacity of the tank or container; whichever is greater, as determined by reconciliation of inventory measurements made in accordance with subsection 22a-449 (d)-1 (g) of these regulations.

"CFR" means the Code of Federal Regulations revised as of July 1, 1991, unless otherwise specified.

"Discharge" means the emission of any water, substance or material into the waters of the state, whether or not such substance causes pollution.

"Existing facility" means a facility the construction or installation of which began prior to November 1, 1985, including, but not limited to, facilities which are abandoned and facilities which are temporarily out-of-service.

"Facility" means a system of interconnected tanks, pipes, pumps, vaults, fixed containers and appurtenant structures, singly or in any combination, which are used or designed to be used for the storage, transmission or dispensing of oil or petroleum liquids, including any monitoring devices. As used in Section 22a-449 (d)-1 of these regulations, the term "facility" refers only to nonresidential underground facilities and does not include residential underground heating oil storage tank systems. "Failure" means a condition which can or does allow the uncontrolled passage of liquid into or out of a facility, and includes but is not limited to a discharge to the waters of the state without a permit issued pursuant to Section 22a-430 of the General Statutes.

"Failure determination" means the evaluation of a facility component in accordance with subsection 22a-449 (d)-1 (i) of these regulations to determine whether a failure has occurred. "Farm" means a tract of land devoted to the production of crops or raising of animals, including, but not limited to, fish, and associated residences and improvements, including fish hatcheries, rangeland and nurseries with growing operations;

"Flammable Liquid" means a flammable liquid as determined in accordance with NFPA 30 and having a flash point below 100 degrees Fahrenheit (37.8 degrees centigrade) and having a vapor pressure not exceeding 40 pounds per square inch (absolute) (2,068 millimeters mercury) at 100 degrees Fahrenheit (37.8 degrees centigrade).

"Life expectancy" means the time period within which a failure is not expected to occur as determined in accordance with subsection 22a- 449 (d)-1 (h) of these regulations. "Life expectancy determination" means the evaluation of a facility component in accordance with subsection 22a-449 (d)-1 (h) of these regulations to determine its life expectancy.

"Liquid" means any fluid, including, but not limited to, oil and petroleum fluids. "Listed" means included in a list published by a testing laboratory which (1) is approved by the Commissioner of Environmental Protection in consultation with the Bureau of the State Fire Marshal, (2) maintains periodic inspection of production of listed

equipment or materials, and (3) states in their listing either that the equipment, material or procedure meets appropriate standards or has been tested and found suitable for use in a specified manner.

"New facility" means a facility the construction or installation of which begins on or after November 1, 1985, including, but not limited to, facilities which replace existing facilities, facilities which are moved from one location to another, facilities which are abandoned, and facilities which are temporarily out-of-service.

"NFPA 30" means National Fire Protection Association publication number 30 entitled, "Flammable and Combustible Liquids Code," as enforced by the State Fire Marshal pursuant to Section 29-320 of the Connecticut General Statutes and Sections 29-320-1, 29- 320-2, and 29-320-3 of the Regulations of Connecticut State Agencies, as of the effective date of these regulations.

"NFPA 329" means National Fire Protection Association publication number 329 entitled, "Underground Leakage of Flammable and Combustible Liquids," as enforced by the state fire marshal pursuant to Section 29-320 of the Connecticut General Statutes and Sections 29-320-1, 29-320-2, and 29-320-3 of the Regulations of Connecticut State Agencies, as of the effective date of these regulations.

"Nonresidential" when referring to a facility means a facility which serves any commercial, industrial, institutional, public or other building, including, but not limited to, hotels and motels, boarding houses, hospitals, nursing homes and correctional institutions, but not including residential buildings.

"Oil or petroleum liquid" or "product" means oil or petroleum of any kind in liquid form including, but not limited to, waste oils and distillation products such as fuel oil, kerosene, naphtha, gasoline and benzene.

"Operator" means the person or municipality in control of, or having responsibility for, the daily operation of a facility.

"Owner" means the person or municipality in possession of or having legal ownership of a facility. "Residential building" means any house, apartment, trailer, mobile home, or other structure, composed of four residential units or fewer, occupied by individuals as a dwelling provided that if the structure is not used solely as a dwelling, the nominal capacity of the facility, exclusive of piping, serving such structure does not exceed two thousand one hundred (2,100) gallons.

"Residential underground heating oil storage tank system" has the same meaning as provided in section 22a-449a(6) of the Connecticut General Statutes.

"Substantial modification" means the construction or installation of any addition to a facility or the restoration or renovation of a facility which: increases or decreases the on- site storage capacity of the facility; significantly alters the physical configuration of the facility; or impairs or improves the physical integrity of the facility or its monitoring systems; or modifies the facility so as to comply with the standards for new facilities specified in subdivision 22a-449 (d)-1 (e) (1) of these regulations.

"Substantial modification" shall not include a modification for the purpose of extending life expectancy in accordance with subparagraph 22a-449(d)-1 (h) (2) (D) of these regulations.

"Temporarily out-of-service" means not in use, in that no regular filling or drawing is occurring; or not established and maintained in accordance with these regulations; or not regularly attended and secured.

"Underground" when referring to a facility or facility component means that ten percent or more of the volumetric capacity of the facility or component is below the surface of the ground and that portion which is below the surface of the ground is not fully visible for inspection.]

Partial Exemptions.

(A) An UST system which satisfies all of the following criteria is exempt from subsections (d) and (h) of this section:

(i) The capacity of the UST associated with such system is less than 2,100 gallons;

(ii) The sole intended use of the oil or petroleum liquid is for heating on the premises where stored; and

(iii) The UST is double walled and installed on or after October 1, 2003.

(B) An UST system which satisfies both of the following criteria is exempt from subsection (g)(9) of this section:
(i) The sole intended use of the oil or petroleum liquid is for heating on the premises where stored; and
(ii) The UST associated with such system is single-walled and installed prior to October 1, 2003.

[(3) Purpose

The purpose of Section 22a-449(d)-1 is to establish standards for the construction, operation, maintenance, and closure of certain nonresidential underground facilities, as specified in subsection (a)(1) of this section, that contain oil or petroleum liquids and that are not regulated under sections 22a-449(d)-101 to 22a-449(d)-113, inclusive, of the Regulations of Connecticut State Agencies.]

(b) **[Discharges prohibited] Definitions** When used in this section, the following terms shall have the meanings given below:

[No owner or operator shall discharge any water, substance or material, including but not limited to oil or petroleum liquids, from any facility to the waters of the state without first obtaining a permit for such discharge pursuant to Section 22a-430 of the General Statutes, as amended.]

(1) "Abnormal loss or gain" means an apparent loss or gain in liquid exceeding 0.5 percent of (1) the volume of product used or sold by the owner or operator during any seven consecutive day period, or (2) the volumetric capacity of the tank; whichever is greater, as determined by reconciliation of inventory measurements made in accordance with subsection (g) of this section;

(2) "Closure" means removing an UST from the ground or rendering an UST permanently unusable (with or without any connected piping) or removing or rendering permanently unusable more than 50 percent of the piping associated with an UST, and for either tank or piping, as applicable, performing the assessment required by subsection (j) of this section;

(3) "Commissioner" means the Commissioner of Energy and Environmental Protection or the commissioner's designee;

(4) "Department" means the Connecticut Department of Energy and Environmental Protection;

(5) "Dispenser" means equipment located above ground that delivers oil or petroleum liquid transferred to a point of use outside the UST system;

(6) "Failure" means a condition which can or does allow the uncontrolled passage of liquid into or out of any portion of an UST system, including, but not limited to, the primary or secondary containment system;

(7) "Failure determination" means an evaluation to determine whether a failure has occurred using any test that takes into consideration the temperature coefficient of expansion of the product being tested as related to any temperature change during the test, is capable of detecting a loss of 0.05 gallons per hour, and is conducted in accordance with a code of practice or other standard developed by a nationally recognized association or independent testing laboratory;

(8) "Farm" means a tract of land devoted solely to the commercial production of crops or raising of animals, including, but not limited to, fish, and associated residences and improvements, including fish hatcheries, rangeland and nurseries with growing operations;

(9) "Flammable Liquid" means a flammable liquid as determined in accordance with NFPA 30 and having a flash point below 100 degrees Fahrenheit (37.8 degrees centigrade) and having a vapor pressure not exceeding 40 pounds per square inch (absolute) (2,068 millimeters mercury) at 100 degrees Fahrenheit (37.8 degrees centigrade);

(10) "Life expectancy" means the time frames specified in subsection (h) of this section;

(11) "Liquid" means any fluid, including, but not limited to, oil and petroleum fluids;

(12) "NFPA" means National Fire Protection Association;

(13) "Nonresidential" means, when referring to an UST system, an UST system which serves any commercial, industrial, institutional, public or other building, including, but not limited to, hotels and

motels, boarding houses, hospitals, nursing homes and correctional institutions, and residential buildings with greater than four living units;
(14) "Oil or petroleum liquid" means oil or petroleum of any kind in liquid form including, but not limited to, used oil, waste oils, bio-fuel blends, and distillation products such as fuel oil, kerosene, naphtha, and gasoline;
(15) "Operator" means the person or municipality in control of or having responsibility for the daily operation of an UST system;
(16) "Owner"' means the person or municipality in possession of or having legal ownership of an UST system;
(17) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of oil or petroleum liquids from any UST system, including but not limited to, into secondary containment, or into or onto anything, anywhere, except from the dispenser into a tank, container or similar device used to hold or contain oil or petroleum liquid, or as otherwise authorized by the commissioner;
(18) "Residential building" means any house, apartment, trailer, mobile home, or other structure, composed of four living units or fewer, occupied by individuals solely as a dwelling;
(19) "Tank" means a stationary object designed to contain, or that contains, an accumulation of oil or petroleum liquid and constructed of non-earthen materials including, but not limited to, concrete, steel, fiberglass, and plastic, that provide structural support;
(20) "Underground storage facility" means a parcel of real property on which an UST or UST system is located;
(21) "Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used or designed to contain, or that contains, an accumulation of substances referenced in subsections (a)(1)(A) and (a)(1)(B) of this section, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more either beneath the surface of the ground or covered with earthen material;
(22) "UST system" means a system of interconnected tanks, pipes, pumps, vaults, fixed containers and appurtenant structures, singly or in any combination, which is used or has been used for the storage, transmission or dispensing of oil or petroleum liquids, including any monitoring devices. As used in this section, the term "UST system" refers only to UST systems of which 10 percent or more of the volumetric capacity of the UST system is below the surface of the ground and that portion which is below the surface of the ground is not fully visible for inspection. As used in the section, the term "UST system" does not include residential underground heating oil storage tank systems;
(23) "UST system component" means any of the following items associated with the use of an UST: an underground storage tank, connected piping, dispensers, spill buckets, containment sumps or release detection and release prevention equipment. As used in this section, the term "UST system component" does not include piping that does not routinely contain regulated substances or items associated with routine maintenance such as filters or o-rings;
(24) "Under-dispenser containment sump" means containment underneath a dispenser system designed to prevent a release from the dispenser and piping within or above the under-dispenser containment sump from leaving the UST system.

(c) **[Exemptions] Releases prohibited**

[(1) Facilities which meet all of the following criteria are exempt from subsections 22a- 449 (d)-1 (d), (g), (h) and (i) of these regulations:

(A) the nominal capacity exclusive of piping is less than two thousand one hundred (2,100) gallons; the sole intended use of the oil or petroleum liquid is for on-site heating or intermittent stationary power production such as stand-by electricity generation or irrigation pump power; (C) the oil or petroleum liquid stored is not

intended for resale; and (D) the facility is not used for the storage or handling of waste oil.

(2) Facilities which are used solely for the storage, transmission or dispensing of viscous oil and petroleum liquids which will not flow at temperatures below sixty degrees Fahrenheit (60°) are exempt from the requirements of these regulations. For the purpose of this subdivision, a liquid will be deemed to flow if, when maintained for at least forty-eight hours at a temperature of sixty degrees Fahrenheit (60°) and at a pressure of 14.7 pounds per square inch absolute, it assumes the shape of a container also maintained at a temperature of sixty degrees Fahrenheit for at least forty-eight hours.

(3) Facilities used solely for on-site heating, process steam generation, other on-site combustion or manufacturing processes or waste oil storage are exempt from subdivision 22a-449(d)-1(g)(2).]

An owner and operator shall ensure that there is no release of any water, substance or material, including, but not limited to, oil or petroleum liquids from an UST system.

(d) **[Reporting] Notification requirements**

[(1) By May 8, 1986, the owner or operator of each existing facility shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by subsection (h).

(2) Within thirty days following completion of installation of a new facility an owner or operator shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by subsection (h).

(3) The notification required by subdivisions (1) and (2) of this subsection shall include but not be limited to the following: facility location and capacity, date of installation, contents, type of facility, and type of monitoring systems, if any, results of life expectancy determinations, and any other information which the commissioner deems necessary.

(4) By May 8, 1986, the owner or operator of an abandoned or temporarily out-of-service facility shall notify the commissioner of the location, type and capacity of such facility and the date it was abandoned or removed from service.

(5) Within thirty days of completion of a failure determination required by subsection (i), the owner or operator shall notify the commissioner and the office of the local fire marshal of the result of such failure determination.

(6) Owners and operators shall report any changes in information provided in accordance with this subsection within thirty days.

(7) Each notification required by this subsection shall be submitted on forms furnished or prescribed by the commissioner.]

(1) The owner or operator of an UST system shall submit the following notifications to the commissioner and the local fire marshal:

(A) The annual notification required under section 22a-449(e) of the Connecticut General Statutes. Such notification shall be submitted within the time period specified by the commissioner on the department's internet website. The time period shall be a minimum of 30 days and shall conclude not later than October 10 of each year; and

(B) Within 30 days:

i. Notification of the installation of an UST system
ii. Notification of the permanent closure of an UST system
iii. Notification of any change in information provided in any prior notification submitted to the commissioner and the local fire marshal in accordance with this subsection, including temporarily taking an UST system out of service.

(2) Each notification required by this subsection shall be submitted by the owner and operator on forms furnished by and in a manner prescribed by the commissioner on the department's internet website, including an electronic

submission and shall contain all information prescribed by the commissioner. Each notification shall be accompanied by any fee as required by sections 22a-449(e) and 22a-449(h) of the Connecticut General Statutes and shall be deemed incomplete if not accompanied by the required fee.

(e) **Design[,] and construction[, installation, and maintenance]**

The owner or operator of each UST system shall ensure compliance with the following requirements:

[(1) All new facilities and new components of substantially modified facilities shall conform to the following standards:

(A) Each underground tank or container shall:

(i) be a listed fiberglass-reinforced plastic (FRP) tank which is equipped with contact plates under all fill and gauge openings and is chemically compatible with the contained oil or petroleum liquid as determined by the tank or container manufacturer's warranty; or

(ii) be a listed steel tank externally coated with a factory applied corrosion resistant coating approved by the manufacturer for the proposed use, and equipped with cathodic protection and permanent cathodic protection monitoring devices, and contact plates under all fill and gauge openings.

(B) All other underground facility components that routinely contain regulated substance are in contact with the ground shall:

(i) be protected against corrosion by use of non-corrosive materials or steel components with factory applied corrosion resistant coating and cathodic protection and permanent cathodic protection monitoring devices;

(ii) be designed, constructed and installed so as to allow failure determination of all underground piping without the need for substantial excavation; and

(iii) be chemically compatible with the contained oil or petroleum liquid as determined by the manufacturer's warranty.

(C) The installation and maintenance of underground components of new facilities and the substantial modification of underground components of new or existing facilities shall be done in accordance with NFPA 30 and the manufacturer's specifications and recommendations. If provisions of NFPA 30 are inconsistent with the manufacturer's specifications or recommendations, the provision which imposes the most stringent and protective requirement shall control. Within thirty (30) days after completion of installation, the owner or operator shall submit to the commissioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with this subsection.

(D) All cathodic protection monitoring devices and cathodic protection systems for underground components shall meet the specifications of the manufacturer of the component(s) being protected and shall be installed and maintained in accordance with the specifications and recommendations of the manufacturer(s) of the monitoring device, the cathodic protection system, and the underground component being protected, as applicable. If a manufacturer's specifications or recommendations are inconsistent with any provision of these regulations, the provision which imposes the most stringent and protective requirement shall control. Within thirty (30) days after completion of installation, the owner or operator shall submit to the commissioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with this subsection.

(E) All cathodic protection systems which protect underground facility components shall be tested annually. A structure to soil test voltage reading of at least minus 0.85 volts measured between the structure and a copper-copper sulfate electrode must be maintained. Voltage drops other than those across the structure electrolyte boundary must be considered for valid interpretation of the voltage measurements. Impressed current cathodic protection systems shall be checked monthly to assure that the system rectifier providing the source of current is operating properly. A monthly record of rectifier current and voltage output shall be maintained. If any cathodic protection system malfunctions or fails to meet the above structure to soil test voltage requirement, it shall be

repaired as quickly as possible but in no event later than thirty (30) days from the date of discovery of the malfunction. Anodes shall be replaced when all other corrective measures which have been taken are not sufficient to maintain the structure to soil test voltage of at least minus 0.85 volts. Other cathodic protection criteria may be used upon written approval of the commissioner.

(2) No owner or operator of an existing facility shall use or operate any underground component of that facility beyond September 1, 1989, or for longer than five years beyond its life expectancy as determined in accordance with subsection 22a-449 (d)-1 (h) of these regulations, whichever is later, unless such component is modified so as to comply with the standards for new facilities specified in subdivision 22a-449 (d)-1 (e) (1) above. If life expectancy has not been determined in accordance with subsection 22a-449 (d)-1 (h) of these regulations, such component shall not be used or operated unless such component is modified so as to comply with the standards for new facilities specified in subdivision 22a- 449 (d)-1 (e) (1) above. If the component is not so modified, it must be removed or abandoned in accordance with procedures specified in NFPA 30.

(3) No underground component of a facility shall be moved from one location to another without prior written approval of the commissioner.

(4) No owner or operator of a facility that complies with the standards for new facilities specified in subdivision 22a-449 (d)-1(e) (1) above shall use or operate any underground component of that facility beyond its life expectancy as determined in accordance with subsection 22a-449 (d)-1 (h) of these regulations. Prior to the last day of the life expectancy of an underground component of a facility that complies with the standards for new facilities specified in subdivision 22a-449 (d)-1 (e) (1) above, the owner or operator shall remove or abandon the underground component in accordance with the procedures specified in NFPA 30.]

(1) **Tanks.** Each tank that is part of an UST system shall:

(A) Be properly designed and constructed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory, unless the commissioner has posted on the department's internet website that use of such code of practice is unacceptable. In addition, the commissioner may post codes of practice deemed acceptable on the department's internet website;

(B) Be constructed of one of the following:

(i) Fiberglass-reinforced plastic;

(ii) Steel coated with a factory applied suitable dielectric material approved by the manufacturer of such tank for the proposed use and is equipped with corrosion protection through the use of either:

(I) Galvanic cathodic protection attached to the tank; or

(II) An impressed current cathodic protection system that allows the owner or operator to determine whether such impressed current system is properly operating;

(iii) Steel and clad or jacketed with a non-corrodible material; or

(iv) A material or materials posted on the department's internet website;

(C) Be equipped with contact plates under all fill and gauge openings;

(D) If installed on or after October 1, 2003, be a double-walled UST and have secondary containment that can fully contain oil or petroleum liquid leaked from the primary containment until the leak is detected and removed and the secondary containment shall prevent the release of oil or petroleum liquid from the tank at any time during the operational life of such tank; and

(E) (i) If installed on or after October 1, 2003, but on or before {insert date 90 days after the effective date of the regulations} shall continuously monitor the interstitial space of the tank using inert gas, liquid, a vacuum, electronic monitoring, or mechanical monitoring; and

(ii) If installed after {insert date 90 days after the effective date of the regulations}, shall have continuous interstitial monitoring that monitors both primary containment and secondary containment such that the inner and outer walls are continuously monitored using technology such as inert gas, liquid, or a vacuum.

(2) **Piping.** Piping that routinely contains oil or petroleum liquid and is part of an UST system shall:

(A) Be properly designed and constructed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory, unless the commissioner has posted on the department's internet website that use of such code of practice is unacceptable. In addition, the commissioner may post codes of practice deemed acceptable on the department's internet website;

(B) (i) If installed before {insert the effective date of the regulations}, be constructed of corrodible or non-corrodible material. If the piping is constructed of corrodible material, such piping shall not come in contact with the ground or any water unless such piping is:

(I) Coated with a suitable factory applied dielectric material approved by the manufacturer of such piping for the proposed use; and

(II) Equipped with galvanic cathodic protection attached to the piping, or an impressed current cathodic protection system that allows the owner or operator to perform a structure to soil voltage test of such system to determine whether such system is properly operating; and

(ii) If installed on or after {insert the effective date of the regulations}, be constructed of a non-corrodible material, provided this requirement shall not apply to piping that does not come into contact with the ground or any water; and

(C) If installed on or after October 1, 2003:

(i) Be double-walled with secondary containment that is capable of containing oil or petroleum liquid released from primary containment and prevent the release of oil or petroleum liquid from the piping at any time during the operational life of the UST system; and

(ii) Be equipped with interstitial monitoring, that, at a minimum, has sensors at both ends of the piping run or a vacuum that provides continuous interstitial monitoring; and

(D) For piping that conveys oil or petroleum liquid under pressure, be equipped with an automatic line leak detector capable of detecting the presence of a release of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour by restricting or shutting off the flow of oil or petroleum liquid through piping. The requirements of this subparagraph shall be applicable as follows:

(i) On {insert the effective date of the regulations}, for all piping that conveys oil or petroleum liquid under pressure installed on or after such date; and

(ii) On {insert date 90 days after the effective date of the regulations}, for all piping that conveys oil or petroleum liquid under pressure installed before {insert the effective date of the regulations}.

(3) **Cathodic protection systems.** All cathodic protection systems required by this subsection shall meet the specifications of the manufacturer of any component being protected and shall provide continuous corrosion protection.

(4) **Spill and overfill prevention equipment.** Each UST system shall be equipped with the following:

(A) Spill prevention equipment, such as a spill bucket, capable of containing the amount of oil or petroleum liquid in a transfer hose used to deliver oil or petroleum liquid to an UST when such hose is detached from the fill pipe. Spill buckets that are part of an UST system shall be liquid tight. No spill bucket shall be less than 5 gallons; and

(B) Overfill prevention equipment that will alert the transfer operator when an UST is reaching its maximum capacity to prevent overfilling.

(5) **Containment sumps.**

(A) Under Dispenser Containment Sump. Except for UST systems that do not have a dispenser, each UST system shall comply with the following requirements:

(i) On or after {insert date two years from effective date of the regulations}:

(I) Each UST system installed shall be equipped with under-dispenser containment sumps that comply with the requirements specified in subparagraph (C) of this subdivision;

(II) Each under-dispenser sump installed, replaced or repaired shall comply with the requirements specified in subparagraph (C) of this subdivision; and

(ii) On or after {insert date two years from the effective date of the regulations} no owner or operator shall use an UST system with a dispenser, unless such dispenser is equipped with an under-dispenser containment sump that complies with the requirements specified in subparagraph (C) of this subdivision.

(B) Piping Containment Sump.

(i) Each UST system installed shall be equipped with piping containment sumps that complies with the requirements specified in subparagraph (C) of this subdivision;

(ii) Each piping containment sump installed after {insert the effective date of the regulations} shall comply with the requirements specified in subparagraph (C) of this subdivision; and

(iii) On or after {insert date two years from the effective date of the regulations}, no UST system shall be used, unless such UST system is equipped with piping containment sumps that complies with the requirements specified in subparagraph (C) of this subdivision.

(C) Each under-dispenser containment sump or piping containment sump, as applicable, shall:

(i) Prevent any liquid that may accumulate in such containment sump, including liquid from the piping or pump, and liquid from the dispenser from leaving the containment sump;

(ii) Be capable of immediate visual inspection and provide immediate access to the components of such sump and the components contained therein;

(iii) Be equipped with an alarm or other device such as a sensor that is capable of immediately alerting the owner or operator whenever any liquid, including precipitation, is present in any such sump. The alarm or other device shall:

(I) Operate as intended:

(II) Not be removed, disabled, or otherwise rendered inoperable; and

(III) Be located at the lowest point within the containment sump so that any liquid present in such sump can be detected.

(6) **Dispensers.** On or after {insert date two years from the effective date of the regulation}, all dispensers shall be equipped with the following:

(A) A breakaway device compatible with the oil or petroleum liquid being dispensed that is installed in a vehicle fueling hose that separates when excessive pulling force is applied to the hose, including when a vehicle leaves the dispenser area with the nozzle from the fueling hose still in the vehicle fill pipe. When excessive pulling force is applied to such hose, a breakaway device shall prevent the flow of liquids from either section of the parted hose as well as protect the dispenser from damage; and

(B) A shear valve or crash valve that, when fueling occurs under pressure, automatically shuts off the flow of fuel to the dispenser in the event of a fire inside the dispenser or a severe impact to the dispenser; and

(C) A mechanism or a design for ensuring that a fuel dispensing hose is not on the ground when such hose is not in use.

(f) **[Transfer of facilities]Installation**

[(1) No owner or operator shall transfer ownership, possession or control of any new or existing facility without full disclosure to the transferee of the status of the facility with respect to compliance with these regulations at least fifteen (15) days prior to the transfer. Such disclosure shall include an up-to-date copy of the information submitted to the commissioner pursuant to subsection (d).]

(1) Installation Requirements. The owner or operator of each UST system shall ensure compliance with the following requirements:

(A) All components of an UST system shall be installed, maintained, and repaired in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory and in accordance with the manufacturer's specifications and instructions, unless the commissioner has posted on the department's internet website that use of such code of practice is unacceptable. If the provision of a code of practice or manufacturer instruction are inconsistent the most stringent and protective requirement shall be applied.

(B) All work listed in the manufacturer's checklist for the installation of a tank or piping or a similar document from the manufacturer regarding installation of a tank or piping shall be completed and one of the following conditions shall be satisfied:

(i) The manufacturer has certified the installer, in writing, to install such equipment; or

(ii) The installation has been inspected and approved, in writing, by a registered professional engineer licensed in the state of Connecticut and who has education and experience in UST and piping installation.

(C) Within 30 days after completion of installation of an UST, the owner or operator shall submit to the commissioner, in a manner and on a form prescribed by the commissioner, a statement signed by the installation contractor certifying that the installation has been carried out in accordance with this subsection.

(2) Installation Testing. The owner or operator of each UST system shall ensure compliance with the following requirements:

(A) No UST system installed on or after {insert effective date of the regulations}, shall contain any oil or petroleum liquid until testing has been conducted that demonstrates that there is no release or loss of any liquids from any component of such system. The person who performs the testing shall have the required qualifications to perform such testing and the owner or operator shall retain the results of such testing.

(B) Any test conducted to satisfy the requirements of subparagraph (A) of this subdivision shall be performed in accordance with the manufacturer's guidelines and standards. If there are no manufacturer's guidelines or standards, the owner or operator shall perform such tests in accordance with an applicable method specified in an industry code or engineering standard. If there are no applicable manufacturer's guidelines or standards, industry codes, or engineering standards, the owner or operator shall perform such tests using a test method that, before use, is approved in writing, by a registered professional engineer licensed in the state of Connecticut.

(C) Notwithstanding subparagraph (B) of this subdivision, an owner or operator shall not use a test method to comply with subparagraph (A) of this subdivision if the commissioner has posted on the department's internet website that use of such test method is unacceptable. In addition, the commissioner may post on the department's internet website test methods deemed acceptable.

(g) **[Records; abnormal loss or gain] Operation and maintenance requirements**

[(1) Activity records. The owner or operator of a new or existing facility shall assure the maintenance of up-to-date records of significant construction or installation activities; monitoring; substantial modifications; abandonment, removal or replacement of underground components or protective devices for such components; and any other activity required by an order of the commissioner. The owner or operator shall review such records and attest to their accuracy by signing them no later than seven days following completion of the recorded activity.

(2) Daily inventory records

(A) The owner or operator of a new or existing facility shall assure that the following information is recorded: on a daily basis, the amount of product sold, used and received, and the level of water and product in the tank or container; and on a weekly basis, a reconciliation comparing these figures to determine whether an abnormal loss or gain has occurred. Separate records shall be maintained for each system of interconnected tanks or containers and serving pumps or dispensers. The owner or operator shall review such records and attest to their accuracy by signing them no later than seven days following their recording.

(B) Daily inventory measurements shall be made by gauge or gauge stick or by readout from a listed automatic monitoring device. Such measuring devices shall be calibrated in accordance with the manufacturer's specifications and recommendations.

(C) Daily inventory measurements need not be recorded on those days when a facility is not in operation, except that if such period exceeds fifteen consecutive days inventory measurements shall be recorded on every fifteenth day. A day on which product is delivered to the facility shall be considered a day of operation.

(D) The commissioner may require an owner or operator to perform a failure determination of any facility for

which daily inventory records are not maintained in accordance with this subsection.

(E) When inventory reconciliation indicates an abnormal loss or gain which is not explainable by spillage, temperature variations or other known causes, the owner or operator shall assure the immediate investigation and correction of the source of the abnormal loss or gain. At a minimum, the owner or operator shall take as many of the following steps as necessary to confirm an abnormal loss or gain:

(i) When an inventory record error is not apparent, a recalculation to determine abnormal loss or gain shall be made starting from a point where the records indicate no abnormal loss or gain;

(ii) A detailed visual inspection of those components of the facility which are readily accessible for evidence of failure shall be performed;

(iii) The dispensers of the particular oil or petroleum liquid in question shall be checked for proper calibration;

(iv) A failure determination shall be performed on the piping system between the storage tank or container and dispenser(s) in accordance with subsection (i) of these regulations; and

(v) A failure determination shall be performed on the tank or container in accordance with subsection (i) of these regulations.

(F) When an abnormal loss or gain is confirmed, the owner or operator shall immediately report the abnormal loss or gain to the state police in accordance with Section 22a-450 of the General Statutes, as amended.

(3) All records required by subdivisions (1) and (2) of this subsection shall be kept on the premises of the facility for a period of at least five years and shall be available for immediate inspection by the commissioner or his or her representative during reasonable hours.]

The owner or operator of each UST system shall comply with the following requirements:

(1) Each UST system shall be made of materials that are compatible with any oil or petroleum liquid stored in such system. This requirement shall apply to the entirety of an UST system.

(2) (A) The owner or operator of an UST system storing greater than 10 percent ethanol or greater than 20 percent biodiesel shall demonstrate to the commissioner upon request that such oil or petroleum liquid are compatible with the tank, piping, containment sumps, under-dispenser containment sumps, pumping equipment, release detection equipment, and spill and overfill equipment parts of an UST system using one of the following options:

(i) Certification or listing of UST system equipment or components by a nationally recognized independent testing laboratory for use with such oil or petroleum liquid; or

(ii) An affirmative statement of compatibility in writing from the equipment or component manufacturer that specifies the range of ethanol or biofuel blends with which the equipment or component is compatible.

(B) Documentation demonstrating compliance with the requirements of subparagraph (A) of this subdivision shall be obtained by {insert date 180 days after effective date of the regulations} and maintained in accordance with subsection (g) of this section.

(3) All corrosion protection systems shall be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain oil or petroleum liquid and are in contact with the ground or water. Such corrosion protections shall, at a minimum, be maintained continuously at least minus 0.85 volts, measured between the structure and a copper-copper sulfate electrode.

(4) All cathodic protection systems which protect UST system components shall be tested annually using a structure to soil test voltage test. In order to pass the test, a reading of at least minus 0.85 volts measured between the structure and a copper-copper sulfate electrode shall be maintained.

(5) Impressed current cathodic protection systems, in addition to subdivision (4) of this subsection, shall also be checked monthly to ensure that the system rectifier providing the source of current is operating properly. A monthly record of rectifier current and voltage output shall be maintained.

(6) If any cathodic protection system malfunctions or fails to meet the structure to soil test voltage requirement specified in subdivision (4) of this subsection, the following requirements shall apply:

(A) If such system achieved a passing test within the previous 5 years, the system shall be repaired as quickly as possible, but not later than 30 days from the date of discovery of the malfunction or failed test. If the repair cannot be done within this 30-day period, the owner or operator shall empty the tank of liquid to less than 1 inch not later than the end of this 30-day period and ensure that the system is repaired not later than 60 days from the date of discovery of the malfunction or failed test. If the system is not repaired within this 60-day period, the system shall be closed in accordance with subsection (j) of this section unless otherwise provided by the commissioner in writing.

(B) If such system did not achieve a passing test within the previous 5 years, the UST system shall immediately be emptied to less than 1 inch and shall be closed in accordance with subsection (j) of this section.

(7) (A) Except for a dispenser, no other component of an UST system shall be moved or relocated for use at another location, including another location at the same underground storage facility, without the prior written approval of the commissioner. An approval under this section may include any conditions the commissioner deems appropriate;

(B) No tank or piping shall be moved or relocated from one location to another unless such tank or piping is in compliance with section 22a-449o of the Connecticut General Statutes. For purposes of this subdivision, the life expectancy of a tank or piping that routinely contains product relocated under this section shall be based on the date such tank or piping was originally installed, not the date such UST or piping was relocated; and

(C) An owner or operator of an UST system shall not install or reinstall a dispenser from another location, including another location at the same underground storage facility, unless such dispenser is equipped with a containment sump that meets the requirements of an under-dispenser containment sump in accordance with subsection (e)(5) of this section.

(8) Methods of Release Detection for Double-Walled Petroleum USTs. A double-walled UST shall use interstitial monitoring that complies with the requirements of this subdivision:

(A) The owner or operator of a double-walled tank installed before October 1, 2003, shall perform release detection using any method that complies with the requirements of this subsection, provided that on or after {insert two years after the effective date of this regulation}, such owner or operator shall use monitoring that complies with subparagraphs (B) or (C) of this subdivision.

(B) For a double-walled UST installed on or after October 1, 2003, but before {insert 90 days after the effective date of the regulations}, the release detection shall continuously monitor the interstitial space between the walls of the UST or conduct interstitial monitoring that complies with subparagraph (C) of this subdivision.

(C) For a double-walled UST installed on or after {insert ninety days after the effective date of the regulations}, the release detection shall continuously monitor the integrity of the walls of the tank for a potential failure of the primary and the secondary containment, including both the inner and outer walls of such tank, using technology such as systems that are hydrostatically monitored or under constant vacuum.

(9) Methods of Release Detection for Single-Walled Petroleum USTs.

(A) (i) For a single-walled UST system, the following information shall be recorded on a daily basis, the amount of oil or petroleum liquids used and received, and the level of water and product in the tank; and on a weekly basis, a reconciliation comparing these figures to determine whether an abnormal loss or gain has occurred;

(ii) Separate records shall be maintained for each system of interconnected tanks and serving pumps or dispensers; and

(iii) The owner or operator for each UST system shall review such records and attest to their accuracy by signing them, including by electronic signature, not later than 7 days after the recordation of such data.

(B) Daily inventory measurements shall be made by gauge or gauge stick or by readout from a listed automatic monitoring device. Such measuring devices shall be calibrated in accordance with the manufacturer's specifications and recommendations and 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. The oil or petroleum liquid inputs are

reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery. The measurement of any water level in the bottom of the tank shall be made to the nearest one-eighth of an inch at least once a day.

(C) Daily inventory measurements do not need to be recorded on those days when an UST system is not in operation, except that if such period exceeds 15 consecutive days inventory measurements shall be recorded on every 15th day. A day on which product is delivered to the UST system shall be considered a day of operation.

(D) The commissioner may require an owner or operator to perform a failure determination of any UST system for which daily inventory records are not maintained in accordance with this subsection.

(E) When inventory reconciliation indicates an abnormal loss or gain which is not due to spillage, temperature variations or other known causes, the owner or operator shall immediately investigate and correct the source of the abnormal loss or gain. At a minimum, the owner or operator shall take as many of the following steps as necessary to confirm an abnormal loss or gain:

(i) When an inventory record error is not apparent, conduct a recalculation to determine abnormal loss or gain starting from a point where the records indicate no abnormal loss or gain;

(ii) Perform a detailed visual inspection of those components of the UST system which are readily accessible for evidence of failure;

(iii) Check the dispensers of the particular oil or petroleum liquid in question for proper calibration;

(iv) Perform a failure determination on the piping system between the tank and dispensers in accordance with subsection (i) of this section; and

(v) Perform a failure determination on the tank in accordance with subsection (i) of this section.

(F) When an abnormal loss or gain is confirmed, the owner or operator shall immediately report the abnormal loss or gain to the commissioner in accordance with section 22a-450 of the Connecticut General Statutes and sections 22a-450-1 to 22a-450-6, inclusive, of the Regulations of Connecticut State Agencies, as soon as possible, but in no event later than 1 hour after the discovery of the release. The report shall be made using a telephone number specified by the commissioner or some other method for reporting UST releases specified by the commissioner on the department's internet website.

(G) Beginning {six months after the effective date of these regulations} and notwithstanding subparagraph (E) of this subdivision, a failure determination shall be conducted on all UST systems every 5 years until such systems reach their applicable life expectancy in accordance with subsection (h) of this section.

(h) **Life Expectancy**

[This subsection, in conjunction with subsection 22a-449 (d)-1 (i) of these regulations, specifies when a failure determination must be performed, and when the owner and operator must discontinue use of a facility component in accordance with subdivisions 22a-449 (d)- 1 (e) (2) and (e) (4) of these regulations.

(1) Life expectancy determinations shall be conducted for underground components of new facilities within thirty (30) days following completion of installation or substantial modification of the component, and shall be conducted for underground components of existing facilities by May 8, 1986, as specified in subsection 22a-449 (d)-1 (d) of this section.

(2) Life expectancy shall be as follows:

(A) For fiberglass-reinforced plastic (FRP) facility components, the period of the manufacturer's corrosion or structural warranty, whichever is shorter.

(B) For cathodically protected facility components that meet the requirements of subdivision 22a-449 (d)-1 (e) (1) of these regulations, the period of the manufacturer's corrosion or structural warranty, whichever is shorter, or the life expectancy of the existing or replacement anode(s) as calculated using standard formulae approved in writing by the commissioner. If the cathodic protection system malfunctions or fails to meet the structure to soil voltage requirement in subparagraph 22a-449 (d)-1 (e) (1) (E) of these regulations, and is not

repaired or replaced within thirty days, the life expectancy of the facility components protected by the system shall be reestablished in accordance with either subparagraph (2) (C) or subdivision (3) of this subsection. If life expectancy must be reestablished in accordance with subparagraph 22a-449 (d)-1 (2) (C) of these regulations, the period specified by subparagraph 22a-449 (d)-1 (2) (C) of these regulations shall be deemed to have begun on the earliest date of malfunction or the earliest date on which the structure to soil test voltage reading was less negative than minus 0.85 volts, as applicable, provided that the period specified by subparagraph 22a-449 (d)-1 (2) (C) of these regulations shall not extend beyond the last day of the component's initial life expectancy period.

(C) For facility components not covered in subparagraphs (2) (A) and (2) (B) of this subsection, fifteen years from the date of installation. If the date of installation cannot be documented, the life expectancy shall be determined by a method approved by the commissioner.

(D) The life expectancy of existing facility components which are not in compliance with the standards listed in subdivision 22a-449 (d)-1 (e) (1) of these regulations may be extended by any method, provided:

(i) a failure of the facility component in question has never occurred, as determined by a failure determination conducted in accordance with subdivision 22a-449 (d)-1 (i) (1) of these regulations, or by an alternative method used with the prior written approval of the commissioner;

(ii) the facility component shall not be used or operated for longer than five years beyond its extended life expectancy;

(iii) no tank or container shall be lined more than once to extend its life expectancy;

(iv) the period for which the life expectancy will be extended shall be determined by the owner or operator in a manner approved in writing by the commissioner;

(v) the facility component has not exceeded its original life expectancy as of the date of lining installation; and

(vi) the facility component is not used to store gasoline or other flammable liquids.

(3) The life expectancy of a facility component may be determined by a method other than those set forth in subdivision (2) of this subsection upon written approval of the commissioner.]

(1) No owner or operator of an UST system shall use or operate any tank or piping that routinely contains product beyond its life expectancy as determined in accordance with this subsection. Prior to the last day of the life expectancy of any such tank or piping, the owner or operator shall close such tank or piping in accordance with the closure requirements specified in subsection (j) of this section.

(2) Life expectancy shall be 30 years from the date of installation of each tank or piping. No owner or operator of an UST system shall operate any tank or underground piping that routinely contains product beyond its life expectancy. If the installation date of an UST system component cannot be determined, such component(s) shall be permanently closed in accordance with subsection (j) of this section.

(3) Life expectancy shall be 45 years for a double-walled tank or piping made of fiberglass-reinforced plastic, or any other non-metallic material and using continuous interstitial monitoring that monitors both the primary containment and secondary containment such that the inner and outer wall are continuously monitored using technology such as inert gas, or liquid, or under constant vacuum.

(4) Any tank or piping whose date of installation is unknown shall be deemed beyond the life expectancy upon {the effective date of the regulations} and shall be closed in accordance with subsection (j) of this section.

(5) Notwithstanding the provisions of subdivisions (2) or (3) of this subsection, the period of life expectancy for either tanks or piping that routinely contains product, may upon request to the commissioner, or upon the commissioner's own initiative, be modified by the commissioner. The commissioner may request any information the commissioner deems necessary in responding to such request. Any modification by the commissioner under this subsection may include any conditions the commissioner deems appropriate.

(i)[**Failure determination]** **Failures**

[(1) Failure determinations shall consist of any test that takes into consideration the temperature coefficient of expansion of the product being tested as related to any temperature change during the test, and is capable of detecting a loss of 0.05 gallons per hour. Such test shall be conducted in accordance with NFPA 329. Failure determination equipment and any methods of release detection shall be installed, calibrated, operated and maintained in accordance with the manufacturer's instructions including routine maintenance and service checks for operability and running condition.

(2) Failure determinations shall be conducted by the owner or operator for all underground components of new and existing facilities as follows:

(A) On all fiberglass-reinforced plastic (FRP) facility components, within three to six months after their installation, and within twenty-four to twenty-one months and within twelve to nine months prior to the end of their life expectancy.

(B) On all cathodically protected facility components, within twenty-four to twenty-one months and within twelve to nine months prior to the end of their life expectancy.

(C) Beginning on November 1, 1988, on all existing facility components which are not in compliance with the standards listed in subdivision 22a-449 (d)-1 (e) (1) of these regulations, within thirty-six to thirty-three months prior to the end of their life expectancy and annually thereafter.

(3) Alternative methods and schedules for failure determination may be used with the prior written approval of the commissioner.]

(1) An owner or operator of an UST system shall report any failure immediately, in accordance with section 22a-450 of the Connecticut General Statutes and sections 22a-450-1 to 22a-450-6, inclusive, of the Regulations of Connecticut State Agencies.

(2) The owner or operator of an UST system at which a failure of any UST system component occurs shall immediately empty and discontinue the use of the failed UST system component and:

(A) Remove or abandon such component within 90 days in accordance with procedures specified in subsection (j) of this section;

(B) Repair such component within 60 days; or

(C) Replace all damaged components in accordance with the design and construction requirements in subdivision (e) of this section.

(3) The owner or operator of an UST system which releases oil or petroleum liquids without a permit issued pursuant to section 22a-430 of the Connecticut General Statutes shall immediately cease such release and reclaim, recover and properly dispose of the discharged liquid and any other substance contaminated by the release, restore the environment to a condition and quality acceptable to the commissioner, and shall otherwise repair all damage caused by the release, all to the satisfaction of the commissioner.

(4) When a failure occurs at an UST system, the owner or operator shall ensure all of the system's components are evaluated within 30 days to determine whether there are conditions similar to those that caused the failure. Within 10 days following such evaluation, the owner or operator shall notify the commissioner in writing of the methods and results of each such evaluation. If an additional failure is detected, the owner or operator shall act in accordance with this subsection.

(j) **[Failures]** **Closure of UST systems**

[(1) An owner or operator of a new or existing facility shall report any failure to the state police immediately, in accordance with Section 22a-450 of the Connecticut General Statutes, as amended.

(2) The owner or operator of a new or existing facility at which a failure occurs shall immediately empty and

discontinue the use of the failed facility component and:

(A) Remove or abandon it within ninety days in accordance with procedures specified in NFPA 30; or

(B) Repair it within sixty days; or

(C) Replace all damaged components in accordance with the standards listed in subdivision (e) (1) of these regulations.

(3) The owner or operator of a new or existing facility which discharges oil or petroleum liquids without a permit issued pursuant to Section 22a-430 of the General Statutes shall immediately cease such discharge and reclaim, recover and properly dispose of the discharged liquid and any other substance contaminated by it, restore the environment to a condition and quality acceptable to the commissioner, and repair damage caused by the discharge, all to the satisfaction of the commissioner.

(4) When a failure occurs at a new or existing facility, all of such facility's components shall be evaluated within thirty days to determine whether similar conditions to that which caused the failure exist. Within ten (10) days following such evaluation, the owner or operator shall notify the commissioner in writing of the methods and results of each such evaluation. If an additional failure is detected, the owner or operator shall act in accordance with this subsection.]

(1) An UST system or UST system component shall be closed in accordance with all applicable laws, regulations, codes, and standards, except for any code or standard identified by the commissioner on the department's internet website as unacceptable for the closure of an UST system or UST system component.

(2) At a minimum, the closure of an UST system shall comply with the following requirements:

(A) The entire UST system is emptied and cleaned by removing all liquids and accumulated sludges.

(B) After removal of such liquids and sludges:

(i) For each tank or UST not being closed in place, remove from the ground; or

(ii) For each tank or UST being closed in place, prior to filling the UST with a solid inert material, conduct the requirements prescribed in subparagraphs (C) and (D) of this subdivision; and

(iii) All piping shall be removed from the ground or capped.

(C) An assessment shall be performed at the time of closure and shall include an evaluation of the presence of a release or potential release at all locations where contamination is most likely to be present at the underground storage facility. The selection of sample types, sample locations, and analytical methods, shall take into account the nature of the stored substance, the type of backfill, the depth to groundwater, the presence of rainwater or groundwater, and other factors appropriate for identifying the presence, or potential presence, of a release. Sample locations shall include, at a minimum:

(i) all sides and the bottom of the area where a tank has been removed or closed in-place;

(ii) areas of staining, areas where holes or perforation in the removed tank are visible;

(iii) areas where spill buckets, containment sumps, or dispensers were used; and

(iv) in the case of piping undergoing closure, at least one sample is taken at every 10-foot interval of piping, but for intervals of less than 10 feet, at least one sample.

(D) All sampling and analysis conducted in accordance with subparagraph (C) of this subdivision shall meet the following requirements:

(i) Sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory that is either certified by the Connecticut Department of Public Health or approved in writing by the commissioner; and

(ii) All analytical data used shall be scientifically valid and defensible, with a level of precision, accuracy, and sensitivity commensurate with its intended use. All analytical data shall include an analytical data quality assessment and data usability evaluation prepared by individuals qualified to make such assessment or evaluation in accordance with the requirements in the RSRs. If the commissioner determines that analytical data is not scientifically valid and defensible, or not of a sufficient level of precision, accuracy, and sensitivity to support the

intended use of the data, the commissioner shall identify in writing the reasons for such conclusions and such data shall not be relied upon to demonstrate compliance with this section.

(iii) All results of sampling performed under subdivisions (C) and (D) of this subsection shall be retained in accordance with subsection (*l*) of this section.

(3) If at any time during closure a release is suspected or confirmed, the owner or operator shall:

(A) Report the release in accordance with subsection (i)(1) of this section.

(B) Investigate, remediate, and repair any damage caused by the release in accordance with subsection (i)(3) of this section.

(C) Prepare and submit a closure report that, at a minimum, summarizes the assessment completed in accordance with subdivision (2)(C) of this subsection, provides the complete sample results and analytical data compiled as a result of such assessment, and provides a map showing the extent and concentration of all releases, including locations of samples.

(4) If the activities undertaken pursuant to this subsection, or the report prepared pursuant to subdivision (3)(C) of this subsection regarding closure are not competed to the satisfaction of the commissioner, the commissioner shall notify the owner or operator in writing, identifying what the commissioner deems unsatisfactory, the reasons why and what additional actions are necessary. The owner or operator shall undertake any actions requested by the commissioner within 60 days after receipt of request or within such other time as the commissioner specifies.

(k)**[Abandoned and temporarily out-of-service facilities]****Transfer of UST system ownership, possession or control**

[(1) An owner or operator shall notify the commissioner in writing within thirty days when a new or existing facility is abandoned or rendered temporarily out-of-service.

(2) A facility or facility component shall be abandoned in accordance with procedures specified in NFPA 30.

(3) No person or municipality shall use or operate an abandoned facility.

(4) No person or municipality shall use or operate a temporarily out-of-service facility without giving prior written notice to the commissioner that such facility will be used or operated.]

No owner or operator shall transfer ownership, possession or control of any UST system without full disclosure to the transferee of the status of the UST system's compliance with this section at least 15 days prior to the transfer. Such disclosure shall include an up-to-date copy of the information submitted to the commissioner pursuant to subsection (d) of this section.

(*l*) [**Variances]** **Records**

[(1) The commissioner may grant a variance or partial variance from one or more of the provisions of this section provided such variance will not endanger the public health, safety or welfare or allow pollution of the air, land or waters of the state. An application for a variance shall be submitted by the owner or operator on a form furnished or prescribed by the commissioner and shall include such information as he or she requires.

(2) Failure to supply all information necessary to enable the commissioner to make a determination regarding the application shall be cause for rejection of the application.

(3) In acting on a request for a variance, the commissioner shall balance the degree to which compliance with the requirement in question would create an undue hardship for the applicant, against the benefit to the environment and the public from the applicant's strict compliance with that requirement.

(4) The commissioner may reject an application for a variance as untimely if it is received less than ninety days prior to the required date of compliance for which the variance is sought or if the facility is not in compliance with the requirement for which the variance is sought. For those existing facilities or underground components which are required to be removed or modified by September 1, 1989 in accordance with subparagraph (e) (2) of this section, no application for a variance from the requirements of that subparagraph shall be accepted after

August 1, 1988, which date was the original deadline for such applications when these regulations were first adopted.

(5) The commissioner may limit the duration of a variance and include in a variance any conditions which he or she deems necessary. A variance may be revoked or modified for failure to comply with any such conditions.]

(1) Recordkeeping. The owner or operator of an UST system shall maintain all records regarding each component of the UST system, including installation, operation, maintenance, compatibility, inspection, testing, calibration, release detection, repair, release or suspected release, closure, and any record or report required to demonstrate compliance with any requirement of this section, other than records relating to routine maintenance of such system which includes changing filters or lubricating parts.

(2) The owner or operator of an UST system shall maintain such records:

(A) At the underground storage facility during the operational life of an UST system component, except as may be provided for in section 22a-449q of the Connecticut General Statutes; and

(B) At any location after the operational life of an UST system component. Such records shall be maintained and made available for inspection for one year beyond the operational life of such component.

Sec. 3. Sections 22a-449(d)-101 to 22a-449(d)-113, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:

Sec. 22a-449(d)-101. Technical standards and corrective action requirements for owners and operators of underground storage tank systems[program scope and interim prohibition]applicability, prohibitions and definitions

(a) **Applicability [and purpose of sections 22a-449(d)-101 through 22a-449(d)-113].**

Except as provided in subdivision (1) of this subsection, sections 22a-449(d)-101 to 22a-449(d)-114, inclusive, of the Regulations of Connecticut State Agencies shall apply to all owners and operators of an underground storage tank system. If the owner and operator of an underground storage tank system are separate persons, only one such person is required to demonstrate compliance with the sections 22a-449(d)-101 to 22a-449(d)-114, inclusive, of the Regulations of Connecticut State Agencies, however, both the owner and operator are liable in event of noncompliance of any such regulations.

(1) [The requirements of sections 22a-449(d)-101 to 22a-449(d)-113, inclusive of the Regulations of Connecticut State Agencies shall apply to all owners and operators of an UST system, except as otherwise provided in subdivisions (2) and (3) of this subsection.]

Exemptions. [The following UST systems are excluded from the requirements of section 22a-449(d)-101 to section 22a-449(d)-113, inclusive of the Regulations of Connecticut State Agencies:] Owners and operators of the following UST systems are exempt from the requirements of sections 22a-449(d)-101 to 22a-449(d)-114, inclusive, of the Regulations of Connecticut State Agencies:

(A) Any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, 42 USC, Chapter 82, Subchapter III, or a mixture of such hazardous waste and other regulated substances;

(B) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section [402 or 307 (b) of the Clean Water Act] 22a-430 of the Connecticut General Statutes;

(C) Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;

(D) Any UST system whose capacity is 110 gallons or less;

(E) Any UST system that contains a de minimis concentration of [regulated substances] petroleum; and

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

[(3)] (2) Partial Exemptions. Owners and operators of the following UST systems shall comply with subparagraph (B) of this subdivision:

(A) (i) Wastewater treatment tank systems[, not excluded by subdivision (2)(B) of this subsection] that are not part of a wastewater treatment facility regulated under section 22a-430 of the Connecticut General Statutes;

(ii) Any UST [systems] system containing radioactive material that [are] is regulated under the Atomic Energy Act of 1954, [(42 U.S.C. 2011 and following)] 42 USC, Chapter 23; and

(iii) Any UST system that is part of an emergency generator system at a nuclear power generation [facilities]facility licensed by the Nuclear Regulatory Commission and subject to Nuclear Regulatory Commission requirements regarding design and quality criteria, including, but not limited to, those facilities licensed pursuant to 10 CFR 50.

(B) The owner or operator of an UST system specified in subparagraph (A) of this subdivision shall comply with sections 22a-449(d)-106 and 22a-449(d)-109 to 22a-449(d)-[113]114, inclusive, of the Regulations of Connecticut State Agencies and section 22a-449o of the Connecticut General Statutes and shall:

(i) [Ensure that there are no releases from such UST system due to corrosion or structural failure for the operational life of such system] Prevent releases from such UST system or UST system components for the operational life of such UST system or UST system components;

(ii) Ensure that the UST system is constructed of material that is compatible with the stored regulated substance and that such system satisfies at least one of the following requirements:

(I) Is cathodically protected against corrosion;

(II) Is constructed of non-corrodible material; or

(III) Is constructed of steel clad with a non-corrodible material; [or] and

[(IV) Is] (iii) Ensure that the UST system is designed in a manner to prevent the release or threatened release of any stored regulated substance.

[(C) The owner or operator of an UST system specified in subparagraph (A) of this subdivision is not required to comply with sections 22a-449(d)-102 to 22a-449(d)-105, inclusive, 22a-449(d)-107, and 22a-449(d)-108 of the Regulations of Connecticut State Agencies, provided any such owner or operator complies with subparagraph (B) of this subdivision.

(4) Purpose. The purpose of sections 22a-449(d)-101 to 22a-449(d)-113 of the Regulations of Connecticut State Agencies is to establish a comprehensive regulatory program for underground storage tanks containing regulated substances subject to Subtitle I of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, and the regulations adopted thereunder at 40 CFR 280 and 40 CFR 281.]

(b) **Prohibitions.** No person may own or operate an airport hydrant fuel distribution system or an UST system with a field-constructed tank. The owner or operator of any airport hydrant fuel distribution system or an UST system with a field-constructed tank shall permanently close such system in accordance with section 22a-449(d)-107 of the Regulations of Connecticut State Agencies. [For purposes of this subsection, "airport hydrant fuel distribution system" means an UST system which fuels aircraft and operates under high pressure with large diameter piping, that begins where fuel enters one or more tanks from an external source such as a pipeline, barge, rail car, or other motor fuel carrier and typically terminates into one or more hydrants (fill stands); and "field-constructed tank" means a tank constructed at the underground storage facility that is not pre-fabricated and includes, but is not limited to, a tank constructed of concrete that is poured at such facility, or a steel or fiberglass tank primarily fabricated at such facility.]

(c) **General.** Nothing in sections 22a-449[ ](d)-101 [through]to 22a-449[ ](d)-[113]114, inclusive of [these regulations]the Regulations of Connecticut State Agencies shall affect the [Commissioner's]commissioner's

authority to enforce statutes, regulations, permits or orders administered, adopted or issued by the [Commissioner]commissioner, including, but not limited to, the [Commissioner's]commissioner's authority to issue an order to prevent or abate pollution and any potential source of pollution.

(d) **Definitions.**

When used in sections 22a-449[ ](d)-101 to 22a-449[ ](d)-[113]114, inclusive, of [these regulations]the Regulations of Connecticut State Agencies, the following terms shall have the meanings given below:

[(1) "Abandoned" means rendered permanently closed and unfit for use, in accordance with subsection 22a-449 (d)-107 (b) of these regulations;]

[(2)] (1) "Abnormal loss or gain" means an apparent loss or gain in liquid exceeding 0.5 percent of (1) the volume of product used or sold by the owner or operator during any [seven] 7 consecutive day period, or (2) the volumetric capacity of the tank[or container]; whichever is greater, as determined by reconciliation of inventory measurements made in accordance with section 22a-449[ ](d)-104 of [these regulations]the UST regulations;

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

(2) "Airport hydrant distribution system" or "Airport hydrant system" means an UST system which fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants or 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;

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

[(5)] (4) "Approved training program" means a Class A, B, or C Operator training program [that meets] approved by the [requirements of subsection 22a-449 (d)-108 (b) of the Regulations of Connecticut State Agencies.] commissioner pursuant to section 22a-449(d)-108 of the UST regulations;

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

(7) "Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials;

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

[(9) "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 shall 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;

(10) "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended;

(11)] (6) "CFR" means the Code of Federal Regulations revised as of [July 1, 1991]{insert effective date of these regulations}, unless otherwise specified;

[(12)] (7) "Class A operator" means [the individual or individuals designated by the owner or operator to have primary statutory and regulatory responsibility for the operation and maintenance of the UST systems. The Class A Operator may hold more than one class of operator position. The designation as a 'Class A Operator'

does not confer any other operator status upon the individual. Any person designated as a Class A Operator shall have fulfilled] a person who has successfully completed the training and certification requirements [of an approved training program as set forth] in section 22a-449(d)-108 of the UST regulations for a Class A operator and who has been designated by an owner or operator to serve as a Class A operator[.];

[(13)] (8) "Class B operator" means [the individual or individuals designated by the owner or operator to implement applicable regulatory requirements and implement the daily aspects of the operation, maintenance, and recordkeeping for the UST systems. The Class B Operator may hold more than one class of operator position. The designation as a 'Class B Operator' does not confer any other operator status upon the individual. Any person designated as a Class B Operator shall have fulfilled] a person who has successfully completed the training and certification requirements [of an approved training program as set forth] in section 22a-449(d)-108 of the UST regulations for a Class B operator and who has been designated by an owner or operator to serve as a Class B operator[.];

[(14)] (9) "Class C operator" means [the individual or individuals designated by the owner or operator to have primary responsibility for responding to alarms, emergencies presented by releases, and other problems associated with the operation of the UST systems. The Class C Operator may hold more than one class of operator position. The designation as a 'Class C Operator' does not confer any other operator status upon the individual. Any person designated as a Class C Operator shall have fulfilled] a person who has successfully completed the training and certification requirements of [an approved training program as set forth in] section 22a-449(d)-108 of the UST regulations for a Class C operator and who has been designated by an owner or operator to serve as a Class C operator[.];

(10) "Closure" means removing an UST from the ground or rendering an UST permanently unusable (with or without any connected piping) or removing or rendering permanently unusable more than 50 percent of the piping associated with an UST and for either tank or piping, as applicable, performing the requirements in accordance with section 22a-449(d)-107(a)(4) of the UST regulations;

[(15)] (11) "Commissioner" means the Commissioner of Energy and Environmental Protection [of the State of Connecticut], or the [Commissioner's operator] commissioner's designee;

[(16)] (12) "Compatible" means the ability of [two]2 or more substances to maintain their respective physical and chemical properties upon contact with one another for the [design] life expectancy of the [tank]UST system under conditions likely to be encountered in the UST;

[(17)] (13) "Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to [a tank] an UST system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins [two] 2 UST systems should be allocated equally between them;

[(18) "Consumptive use with respect to heating oil" means consumed on the premises;

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

(14) "Containment sump" means a piping containment sump and an under-dispenser containment sump;

(15) "Contact plate" means a device, usually a flat piece of metal or other material, intended to absorb the impact of repeated insertions of gauge sticks and to help dissipate the impact of product being delivered into an UST;

[(20)] (16) "Day" means calendar day[, unless otherwise specified];

[(21)] (17) "Department" or ["DEP"] "DEEP" means the Connecticut Department of Energy and

Environmental Protection [or DEEP* (*Public Act 11-80, effective July 1, 2011, established the Department of Energy and Environmental Protection as the successor agency to the Department of Environmental Protection)];

[(22)] (18) "Dielectric material" means a material that does not conduct direct electrical current.

Dielectric coatings are used to electrically isolate UST systems from the surrounding soils.

Dielectric bushings are used to electrically isolate portions of the UST system including, but not limited to, tank from piping;

[(23) "Discharge" means the emission of any water, substance or material into the waters of the state, whether or not such substance causes pollution;]

[(24)] (19) "Dispenser" means equipment located above ground that meters the amount of regulated substances transferred to a point of use outside the UST system, such as a motor vehicle;

[(25)] (20) "Double-walled underground storage tank" [has the same meaning as provided in section 22a-449o(1) of the Connecticut General Statutes] means an underground storage tank that is listed by Underwriters Laboratories, Incorporated and that is constructed using 2 complete shells to provide both primary and secondary containment, and having a continuous 360 degree interstitial space between the 2 shells which interstitial space shall be continuously monitored using inert gas or liquid, vacuum monitoring, electronic monitoring, mechanical monitoring or any other monitoring method approved in writing by the commissioner before being installed or used;

[(26)] (21) "Double-walled underground storage tank system" means one or more double-walled underground storage tanks connected by double-walled piping and utilizing double-walled piping to connect the underground storage tank to any associated equipment;

[(27)] (22) "Electrical equipment" means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable;

(23) "Environmental professional" or "EP" means a LEP or a PEP, as applicable;

[(28)] (24) "Excavation zone" means the [volume containing the tank system and backfill material] area or location bounded by the ground surface, walls, and floor [of the pit and trenches] into which [the] an UST system is placed at the time of installation;

[(29) "Existing tank system" means a tank system used to contain an accumulation of regulated substances or for which installation has commenced on or before December 22, 1988. Installation is considered to have commenced if:

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

(b)

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

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

(30)] (25) "Failure" means a condition which can or does allow the uncontrolled passage of liquid into or out of any portion of an UST system, [and includes] including, but [is] not limited to, [a discharge to the waters of the state without a permit issued pursuant to Section 22a-430 of the General Statutes] the primary or secondary containment system;

[(31)] (26) "Farm tank" is a tank located on a tract of land, including associated residences and improvements on such parcel, predominantly devoted to the production of crops or raising animals[, including fish, and associated residences and improvements. A farm tank shall be located on the farm property. "Farm" includes] including fish hatcheries, rangeland and nurseries with growing operations;

(27) "Field Constructed Tank" means a tank that is constructed at an underground storage facility that is not pre-fabricated, and includes, but is not limited to, a tank constructed of concrete that is poured at such facility,

or a steel or fiberglass tank fabricated at such facility, including, but not limited to, fabrication by placing fiberglass or plastic inside of a tank;

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

[(33)] (29) "Free product" refers to a regulated substance that is present as a non-aqueous phase liquid [including, but not limited to,] such as liquid not dissolved in water;

[(34)] (30) "Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations;

[(35)] (31) "Hazardous substance" means a substance defined in [Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980] 42 USC 9601(14) or any mixture of such substances and petroleum, but does not include (A) a mixture of petroleum with de minimis quantities or motor fuel additives or (B) any substance regulated as a hazardous waste under subsection (c) of Section 22a-449 of the Connecticut General Statutes[or any mixture of such substances and petroleum];

[(36)] (32) "Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance [defined in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 but not including any substance regulated as a hazardous waste under subtitle C of the Resource Conservation and Recovery Act or any mixture of such substances and petroleum, and which is not a petroleum UST system];

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

[(38)] (34) "Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices;

[(39) "Implementing agency" means the Connecticut Department of Energy and Environmental Protection* (*Public Act 11-80, effective July 1, 2011, established the Department of Energy and Environmental Protection as the successor agency to the Department of Environmental Protection);

(40) "Life expectancy" means the period of time within which a failure is not expected to occur as determined in accordance with section 22a-449 (d)-111;

(41) "Life expectancy determination" means the evaluation of an UST system component in accordance with section 22a-449 (d)-111 to determine its life expectancy;]

(35) "Imminent hazard" means any release that creates, or can reasonably be expected to create, an emergency, a fire, an explosion hazard, a vapor hazard, or a similar hazard to human health, public safety, or the environment;

(36) "Licensed environmental professional" or "LEP" means an environmental professional who has a current valid license issued by the commissioner pursuant to section 22a-133v of the Connecticut General Statutes;

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

[(43)] (38) "Maintenance" means the [normal] operational upkeep necessary to prevent an underground storage tank system from releasing [product] a regulated substance. This includes ensuring that all UST system components are functioning properly;

[(44)] (39) "Motor fuel" means [petroleum or a petroleum-based substance that is motor gasoline, aviation

gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, and is] 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, including: motor gasoline blended with alcohol;

[(37)] (40) "Non-aqueous phase liquid" or "NAPL" [has the same meaning as provided in section 22a-133k-1 of the Regulations of Connecticut State Agencies]means a liquid that is not dissolved in water;

[(45) "New piping containment sump" means the sump housing a turbine pump or piping that distributes petroleum or regulated substances that (A) prevents any liquids that may accumulate in such containment sump, including but not limited to, liquid from the piping or pump, from leaving the containment sump and reaching soil, groundwater or surface waters; (B) is capable of immediate visual inspection and provides immediate access to the components of such sump and the components contained therein; (C) contains release detection equipment, such as a sensor, that at all times is capable of detecting any liquid that may accumulate in such containment sump, including but not limited to, liquid from the turbine pump or piping; and (D) contains an alarm or other device that notifies the owner or operator immediately whenever a liquid accumulates in the containment sump;

(46) "New tank system" means a tank system that shall be used to contain an accumulation of regulated substances and for which installation has commenced after December 22, 1988, including UST systems that are moved from one location to another. (See also "Existing Tank System");

(47) "New under-dispenser containment sump" means a containment sump located underneath a dispenser that (A) prevents any liquids that may accumulate in such containment sump, including but not limited to, liquid from the dispenser, from leaving the containment sump and reaching soil, groundwater or surface waters; (B) is capable of immediate visual inspection and provides immediate access to the components of such sump and any components contained therein; (C) contains release detection equipment, such as a sensor, that at all times is capable of detecting any liquid that may accumulate in such containment sump, including but not limited to, liquid from the dispenser; and (D) contains an alarm or other device that notifies the owner or operator immediately whenever a liquid accumulates in the containment sump:

(48) "Noncommercial purposes with respect to motor fuel" means not for resale;

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

(50)] (41) "Operational life" [refers to]means the period beginning when installation of the [tank] UST system component [has commenced] commences until [the time the tank system is properly] such component has been permanently closed [under section 22a-449 (d)-107 of these regulations] and for any component not subject to permanent closure, when the component has been permanently removed from the UST system or rendered unusable;

[(51)] (42) "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 this section, 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 section 22a-449(d)-108 of the Regulations of Connecticut State Agencies];

[(52) "Operator Response Guidelines" means guidelines that are in written form, including reporting procedures for releases and suspected releases, emergency contact phone numbers, malfunctioning equipment lock-out/tag-out and notification procedures, and initial mitigation protocol for releases, suspected releases and other emergencies;

(53) "Overfill release" is a release that occurs when a tank is filled beyond its capacity, resulting in a release of the regulated substance to the environment;

(54)] (43) "Owner" means the person or municipality in possession of or having legal ownership of an UST system;

(44) "Permitted environmental professional" or "PEP" means an environmental professional who has an

appropriate permit issued by the commissioner pursuant to section 22a-454 of the Connecticut General Statutes;

[(55)] (45) "Person" means an individual, trust, firm, [joint stock] association, partnership, company, [Federal agency,] corporation, nonstock corporation, limited liability company, the federal government, the state, [municipality, commission,] including any agency or political or administrative subdivision of [a] the state, [or any] municipality, commission, interstate body[. "Person" also includes a consortium, a joint venture, a commercial], any officer or governing or managing body of any partnership, association, firm or corporation or any member or manager of a limited liability company or other legal entity[, and the United States Government] of any kind;

(46) "Petroleum" means crude or synthetic oil or any fraction thereof, refined petroleum fraction, that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). Petroleum includes petroleum-based substances comprised of a complex blend of hydrocarbons, such as gasoline, kerosene, heating oils, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, used oils and any bio-fuel blends;

[(56)] (47) "Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other [regulated] substances[. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, used oils and any bio-fuel blend] but does not include a mixture of petroleum and hazardous substances;

[(57)] (48) "Pipe or piping" means a hollow [cylinder or tubular] conduit that is constructed of non-earthen materials;

[(58)] (49) "Pipeline facilities[(including gathering lines)]" are [new and existing] pipe rights-of-way and any associated equipment, facilities, or buildings and includes gathering lines;

(50) "Piping containment sump" means containment housing a turbine pump or piping that distributes regulated substances and prevents releases from leaving the UST system;

[(59)] (51) "Regulated substance" means[:

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

[(60)] (52) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing [from an UST] of regulated substances from any UST system, including but not limited to, into [ground water, surface water or subsurface soils] secondary containment, or into or onto anything, anywhere, except from the dispenser into a tank, container or similar device designed and used to hold or contain regulated substances, or as otherwise authorized by the commissioner;

[(61)] (53) "Release detection" means determining whether a release of a regulated substance has occurred from [the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it] an UST system component or whether water is entering an UST system;

[(62)] (54) "Repair" means to restore a [tank or] UST system component [that has caused a release of product from the UST system] to proper operating condition and does not constitute replacement of an UST system component;

[(63)] (55) "Residential tank" is a tank located on property used primarily for dwelling purposes;

[(64) "SARA" means the Superfund Amendments and Reauthorization Act of 1986;]

(56) "RSRs" means the state remediation standards regulations adopted pursuant to section 22a-133k of the Connecticut General Statutes;

(57) "Secondary containment" 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;

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

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

[(67) "Substantial modification" means the construction or installation of any addition to an UST system or any restoration or renovation of an UST system which: increases or decreases the on-site storage capacity of the UST system; significantly alters the physical configuration of the UST system; or impairs or improves the physical integrity of the UST system or its monitoring system; or modifies the UST system so as to comply with the standards specified in subsection 22a-449 (d)-102 (a) of these regulations;]

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

[(69)] (61) "Tank" is a stationary [device] object designed to contain, or that contains, an accumulation of regulated substances and constructed of non-earthen materials including, but not limited to, concrete, steel, fiberglass, and plastic that provide structural support;

[(70)] (62) "Under-dispenser containment sump" means [a] containment [sump located] underneath a dispenser [whose purpose is] system designed to prevent [liquids that may accumulate in such containment sump, including but not limited to, liquid] releases from the dispenser[,] and piping within or above the under dispenser containment sump from leaving the [containment sump or from reaching the soil, groundwater or surface waters] UST system;

[(71)] (63) "Underground area" means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection [of the exterior of the] that allows a person to visually determine if there has been a release from a tank situated [on or above the surface of the floor] in such room;

[(72)"Underground release means any belowground release;]

[(73)] (64) "Underground storage facility" means a parcel of real property on which an UST or an UST system is located or was previously located;

[(74)] (65) "Underground storage tank" or "UST" means any one or combination of tanks, [(]including underground pipes connected thereto[)], that is used or designed to contain, or that contains, an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more either beneath the surface of the ground[. This] or covered with earthen materials. The term does not include any of the following USTs or piping connected to any such UST:

(A) Farm or residential [tank] UST of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes, meaning not intended for resale;

(B) [Tank] An UST used solely for storing heating oil for consumptive use on the premises where stored;

(C) Septic tank;

(D) Pipeline facility (including gathering lines) [regulated under]:

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

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

(3)] (i) Which is regulated under 49 USC, Chapter 601, or

(ii) Which is an intrastate pipeline facility regulated under state laws [comparable to the provisions] as provided in 49 USC, Chapter 601, [of the law referred to in paragraph (d) (1) or (d) (2) of this definition] and which is determined by the federal Secretary of Transportation to be connected to a pipeline, or to be operated or intended to be capable of operating at pipeline pressure or as an integral part of a pipeline;

[(e)] (E) Surface impoundment, pit, pond, or lagoon;

[(f)] (F) [Storm-water] Stormwater or wastewater collection system;

[(g)] (G) Flow-through process tank;

[(h)] (H) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

[(i)] (I) Storage tank situated in an underground area [including, but not limited to, a basement, cellar, mineworking, drift, shaft, or tunnel if the storage tank is situated upon or above the surface of the floor. The term "underground storage tank" or "UST" does not include any pipes connected to any tank which is described in paragraphs (a) through (i) of this definition];

[(75)] (66) "Underground storage tank system" or "UST system" means [an underground storage tank]one or more USTs, connected [underground] piping, [underground] ancillary equipment, and containment system, if any;

[(76) "Upgrade" means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of product;]

(67) "Underground storage tank regulations" or "UST regulations" means sections 22a-449(d)-101 to 22a-449(d)-114, inclusive, of the Regulations of Connecticut State Agencies and when identified by a specific reference, "UST regulations" also means any individual section or specific provision of sections 22a-449(d)-101 to 22a-449(d)-114, inclusive, of the Regulations of Connecticut State Agencies;

(68) "UST system component" means any of the following items associated with the use of an UST: an underground storage tank, connected piping, dispensers, spill buckets, containment sumps or release detection or release prevention equipment. As used in the UST regulations, the term "UST system component" does not include piping that does not routinely contain regulated substances or items associated with routine maintenance such as filters or o-rings;

[(77)] (69) "Wastewater treatment tank" means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods[.];

[(78) The following terms are defined as provided in section 22a-449 (d)-1 of these regulations: "liquid"; "listed"; "NFPA 30"; and "temporarily out-of-service."]

Sec. 22a-449(d)-102. UST systems: [design, construction]performance standards, installation and testing[notification]

(a) **Performance standards for [new] UST systems.**

[In order to prevent releases due to structural failure, corrosion, or spills and overfills for the operational life] The owner and operator of [a the, all owners and operators of new] an UST [systems] system shall [meet] ensure that such system complies with the following requirements. [Any substantial modification of UST systems shall meet the following requirements:]

(1) Tanks. Each tank that is part of an UST system shall [be listed and properly designed and constructed, and any portion underground that routinely contains product shall be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing

laboratory as specified below]:

(A) [The tank is constructed of fiberglass-reinforced plastic; or] Be properly designed and constructed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory, unless the commissioner has posted on the department's internet website that use of such code of practice is unacceptable. In addition, the commissioner may post codes of practice deemed acceptable on the department's internet website; and

(B) [The tank is constructed of steel and cathodically protected including a permanent cathodic protection monitoring device in the following manner] Be constructed of:

(i) [The tank is coated with a factory applied suitable dielectric material approved by the manufacturer for the proposed use] Fiberglass-reinforced plastic;

(ii) [Field-installed cathodic protection systems are designed by a corrosion expert;] Steel coated with a factory applied suitable dielectric material approved by the manufacturer of such tank for the proposed use and is equipped with corrosion protection through the use of either:

[(iii) Impressed current systems are designed to allow determination of current operating status as required in subdivision 22a-449 (d)-103 (b) (3) of these regulations; and

(iv) Cathodic protection systems are operated and maintained in accordance with subsection 22a- 449 (d)-103 (b) of these regulations and manufacturer's specifications to the extent such specifications are no less stringent than subsection 22a-449 (d)-103 (b) of these regulations, or according to guidelines established by the implementing agency and have permanent monitoring devices; or

(C) The tank construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than subdivisions 22a-449 (d)-102 (a) (1) (A) and (B) of these regulations and such protection has been approved in writing by the implementing agency prior to installation of the UST system.

(2) Tank Notes

(A) The following industry codes may be used to comply with subdivision 22a-449 (d)-102 (a) (1)(A) of these regulations: Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber- Reinforced Plastic Underground Storage Tanks for Petroleum Products"; Underwriter's Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products"; or American Society of Testing and Materials Standard D4021-86, "Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks."

(B) The following codes and standards may be used to comply with subdivision 22a-449 (d)-102 (a) (1) (B) of these regulations:

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

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

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

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

(I) Galvanic cathodic protection attached to the tank; or

(II) An impressed current cathodic protection system that allows the owner or operator to determine whether such impressed current system is properly operating; or

(iii) Steel and clad or jacketed with a non-corrodible material;

(C) Be equipped with contact plates under all fill and gauge openings; and

(D) In addition to compliance with subdivision (1)(A) to (1)(C), inclusive, of this subsection, for tanks installed on or after October 1, 2003, be a double-walled underground storage tank with secondary containment that can fully contain regulated substances leaked from the primary containment until the regulated substances are detected and removed and that can prevent the release of regulated substances from the tank at any time during the operational life of such tank; and

(i) For tanks installed on or after October 1, 2003, but on or before {insert date 90 days after the UST regulations take effect}, continuously monitor the interstitial space of the tank of such UST system using inert gas, liquid, a vacuum, electronic monitoring, or mechanical monitoring; and

(ii) For tanks installed after {insert date 90 days after the UST regulations take effect}, have continuous interstitial monitoring that monitors both primary containment and secondary containment, such that the inner and outer walls are continuously monitored using technology such as inert gas, liquid, or a vacuum, except that tanks installed after {insert effective date of regulations} may have an electronic or mechanical system that does not continuously monitor both the inner and outer wall, such as a system utilizing a dry space with a sensor, provided that the tank and piping, whichever is applicable, shall meet the following conditions;

(I) Be used for the storage of petroleum only;

(II) Be constructed of double walled fiberglass-reinforced plastic or composite steel;

(III) Have striker plates beneath each access point present since time of installation;

(IV) Utilize non-metallic piping;

(V) Have piping containment sumps and under dispenser containment sumps that are liquid tight and monitored;

(VI) Pass an interstitial test that meets the requirements of the Petroleum Equipment Institute, Recommended Practice 1200-12 every 6 months until permanently closed;

(VII) Not be located within an aquifer protection area or within 1,000 feet of a potable well, not including potable wells on the site where the tank is located; and

(VIII) Conduct line leak testing, when required by section 22a-449(d)-104 of the UST regulations, every 6 months; and

(E) For a hazardous substance UST:

(i) Comply with subparagraphs (A) to (D), inclusive, of this subdivision;

(ii) Be equipped with external liners, including vaults, designed, constructed, and installed to:

(I) Contain 100 percent of the capacity of the largest tank within its boundary;

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

(III) Surround the tank completely so that it is capable of preventing lateral and vertical migration of regulated substances; and

(iii) If installed before October 1, 2003, be double-walled, be designed, constructed, and installed to detect and fully contain a release from any portion of the primary containment system, including the inner wall of a tank, and have a secondary containment designed, constructed and installed to:

(I) Continuously monitor for any liquid in the secondary containment;

(II) Fully contain any liquid that is in such secondary containment until such liquid is detected and removed, except for brine being used for the purposes of interstitial monitoring; and

(III) Prevent the release of any liquid outside of such secondary containment.

[(3)](2) Piping. The owner or operator of an UST system shall ensure that all piping that routinely contains regulated substances and is [not in contact with the ground shall meet the requirements in subparagraph 22a-449 (d)-102 (a) (9) of these regulations. The piping that routinely contains regulated substances and is in contact with the ground shall be properly designed, constructed, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below] part of such UST system is:

(A) [The piping is constructed of fiberglass-reinforced plastic; or] Properly designed and constructed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory, unless the commissioner has posted on the department's internet website that use of such code of practice is unacceptable. In addition, the commissioner may post codes of practice deemed acceptable on the department's internet website; and

(B) [The piping is constructed of steel and cathodically protected in the following manner:

(i) The piping is coated with a suitable dielectric material;] Constructed of a non-corrodible material; or

[(ii)Field-installed cathodic protection systems are designed by a corrosion expert;]

(C) Constructed of steel. If such piping is constructed of steel, such piping shall not come in contact with the ground or any water unless such piping is:

[(iii) Impressed current systems are designed to allow determination of current operating status as required in subdivision 22a-449 (d)-103 (b) (3) of these regulations; and

(iv) Cathodic protection systems shall have permanent monitoring devices and shall be operated and maintained in accordance with subsection 22a-449 (d)-103 (b) of these regulations and manufacturer's specifications to the extent such specifications are no less stringent than subsection 22a-449 (d)-103 (b) of these regulations, or according to guidelines established by the implementing agency; or

(C) The piping construction and corrosion protection are determined by the implementing agency to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in subparagraphs 22a-449 (d)-102 (a) (3) (A) and (B) of these regulations and such protection has been approved in writing by the implementing agency and have permanent monitoring services; prior to the installation of the UST system.

(4) Piping Notes

(A) The following codes and standards may be used to comply with subparagraph 22a-449 (d)-102 (a) (3) (A) of these regulations:]

[(I) Underwriters Laboratories Subject 971, "UL Listed Non-Metal Pipe";] (i) Coated with a suitable factory applied dielectric material approved by the manufacturer of such piping for the proposed use; and

[(II)] (ii) Equipped with:

(I) Galvanic cathodic protection attached to the piping; or

(II) An impressed current cathodic protection system that allows the owner or operator to perform a structure to soil voltage test of such system to determine whether such system is properly operating; and

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

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

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

(B) The following codes and standards may be used to comply with subparagraph 22a-449 (d)-102 (a) (3) (B) of these regulations:

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

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

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

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

(D) In addition to compliance with subparagraphs (A) and (B) or (C) of this subdivision:

(i) Except for repairs to piping pursuant to section 22a-449(d)-103(m)(2)(C) of the UST regulations, piping installed on or after October 1, 2003, shall:

(I) Be double-walled with secondary containment that is capable of fully containing regulated substances released from primary containment and preventing the release of regulated substances from the piping at any time during the operational life of the UST system; and

(II) Be equipped with interstitial monitoring, that, at a minimum, has sensors at both ends of the piping run or a vacuum that provides continuous interstitial monitoring; and

(ii) All piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector capable of detecting the presence of a release of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour by restricting or shutting off the flow of regulated substances through piping.

(E) The owner or operator shall ensure that all underground piping associated with a hazardous substance UST:

(i) Complies with the requirements of subparagraphs (A) through (D), inclusive, of this subdivision; and

(ii) If such piping is installed before October 1, 2003, that such piping is equipped with secondary containment that is designed,
constructed and installed to:

(I) Allow proper monitoring for a release from such piping;

(II) Fully contain any liquid that is in such secondary containment until such liquid is detected and removed, except for brine being used for the purposes of interstitial monitoring; and

(III) Prevent the release of any liquid outside of such secondary containment.

(3) Cathodic protection systems. All cathodic protection systems required by this subsection shall meet the specifications of the manufacturer of the component(s) being protected and shall be capable of continuously providing corrosion protection.

[(5)] (4) Spill and overfill prevention equipment. The owner or operator of an UST system which receives transfers of 25 gallons or more of a regulated substance at one time shall ensure that such UST system complies with the following requirements:

[(A) Except as provided in subparagraph (B) of this subdivision, to prevent spilling and overfilling associated with product transfer to an UST system, owners and operators shall use the following:

(i) Spill prevention equipment that prevents the release of regulated substances to the environment when the transfer hose is detached from the fill pipe; and

(ii) Overfill prevention equipment that:

(I) Automatically shuts off flow into the tank when the tank is no more than 95 percent full; or

(II) Alerts the transfer operator when the tank is no more than 90 percent full by triggering a high-level alarm or restricting the flow into the tank, provided that on or after May 30, 2022, flow restrictors in vent lines shall

not be used to comply with this subclause.

(B) Owners and operators are not required to use the spill and overfill prevention equipment specified in subparagraph (A) of this subdivision if:

(i) Upon written request by the owner or operator prior to installation, the commissioner determines, in writing, that alternative equipment is no less protective of human health and the environment than the equipment specified in subparagraph (A) of this subdivision; or

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

(A) Spill prevention equipment, such as a spill bucket, shall be capable of containing the amount of regulated substances in a transfer hose used to deliver regulated substances to an UST when such hose is detached from the fill pipe. Spill buckets that are part of an UST system shall be liquid tight. In no event shall such spill bucket be less than 5 gallons; and

(B) Overfill prevention equipment shall:

(i) Automatically shut off flow into an UST when such tank is no more than 95 percent full; or

(ii) Alert the transfer operator when an UST is no more than 90 percent full by triggering a high-level alarm that is both audible and visual.

(5) Containment Sumps. The owner or operator of an UST system shall ensure that such UST system complies with the following requirements:

(A) For an UST system installed on or after August 8, 2012:

(i) If the UST system includes a dispenser, it shall be equipped with under-dispenser containment sumps that comply with the requirements specified in subparagraph (C) of this subdivision; and

(ii) No owner or operator shall install piping containment sumps unless such sump complies with the requirements specified in subparagraph (C) of this subdivision; and

(B) For an UST system installed on or after {insert effective date of these regulations}, no owner or operator shall use or operate such UST system, unless such UST system is equipped with piping containment sumps, and as applicable, under-dispenser containment sumps, that comply with the requirements specified in subparagraph (C) of this subdivision.

(C) The owner or operator shall ensure that each under-dispenser containment sump or piping containment sump, as applicable:

(i) Prevents any liquids that may accumulate in such containment sump, including, but not limited to, liquid from the piping or pump, or from the dispenser, as applicable, from leaving the containment sump;

(ii) Be capable of immediate visual inspection and provides immediate access to the components of such sump and the components contained therein; and

(iii) Be equipped with an alarm or other device such as a sensor capable of immediately alerting the owner or operator whenever any liquid, including precipitation, is present in any such sump. The owner or operator shall ensure that any such alarm or other device:

(I) operates as intended;

(II) is not removed, disabled, or otherwise rendered inoperable; and

(III) is located so that any liquid present in such sump can be detected.

(6) Dispensers. An owner or operator shall ensure that all dispensers used with an UST system have the following:

(A) A breakaway device that is compatible with the regulated substance being dispensed and that is installed in a vehicle fueling hose and separates when excessive pulling force is applied to the hose, including when a vehicle leaves the dispenser area with the nozzle from the fueling hose still in the vehicle fill pipe. When excessive pulling force is applied to such hose, a breakaway device shall prevent the flow of liquids from

either section of the parted hose as well as protect the dispenser from damage;

(B) A shear valve or crash valve that, when fueling occurs under pressure, automatically shuts off the flow of fuel to the dispenser in the event of a fire inside the dispenser or a severe impact to the dispenser; and

(C) Except for dispensers located at a marina, a mechanism or a design for ensuring that a fuel dispensing hose is not on the ground when such hose is not in use.

(b) **Installation and Testing Requirements.**

[(6) Installation. All tanks and piping shall be properly installed and maintained in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions, NFPA 30 requirements and sections 22a-449 (d)-102 and 22a-449 (d)-103 of these regulations. If the provisions of these requirements are inconsistent, the provision which imposes the most stringent and protective requirement shall control. All underground piping shall be designed, constructed and installed so as to allow line and tank tightness testing in accordance with section 22a-449 (d)-104 of these regulations without the need for substantial excavation.

(7) Tank and piping system installation practices and procedures described in the following codes, to the extent such practices and procedures are no less stringent and protective than the requirements of NFPA 30, may be used to comply with the requirements of subdivision 22a-449 (d)-102 (a) (6) of these regulations:

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

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

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

(8) Certification of Installation. Within thirty (30) days after completion of installation of an UST system component, the owner or operator shall submit to the commissioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with sections 22a-449 (d)-101 through 22a-449 (d)-113 of these regulations. In addition all owners and operators shall ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with subdivision 22a-449 (d)-102 (a) (6) of these regulations by providing a certification of compliance on the UST notification form in accordance with subsection 22a-449 (d)-102 (b) of these regulations:

(A) The installer has been certified by the tank and piping manufacturers; or

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

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

(D) The installation has been inspected and approved in writing by the implementing agency; or

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

(F) The owner and operator have complied with another method for ensuring compliance with subdivision 22a-449 (d)-102 (a) (6) of these regulations that is determined by the implementing agency by prior written approval to be no less protective of human health and the environment.

(9) Piping. The metallic piping that routinely contains regulated substances and is not in contact with the ground shall be properly maintained and designed, constructed and protected from contact with the ground and ground water for its operational life. Such piping protection shall be continuously monitored during its

operational life for failure. Records of such monitoring shall be maintained to demonstrate compliance with this protection and monitoring requirement in accordance with subsection 22a-449 (d)-103(c).

(10) Cathodic protection systems. All cathodic protection systems shall have permanent monitoring devices and all cathodic protection monitoring devices and cathodic protection systems for UST system components shall meet the specifications of the manufacturer of the component(s) being protected and shall be installed and maintained in accordance with the specifications and recommendations of the manufacturer(s) of the monitoring device, the cathodic protection system, and the component being protected, as applicable. If a manufacturer's specifications and recommendations are inconsistent with any provision of sections 22a-449 (d)-102 and 22a-449 (d)- 103 of these regulations, the provision which imposes the most stringent and protective requirement shall control. Within thirty (30) days after completion of installation, the owner or operator shall submit to the commissioner a statement signed by the installation contractor, certifying that the installation has been carried out in accordance with section 22a-449 (d)-102 and 22a-449 (d)-103 of these regulations.

(11) On and after August 8, 2012, no owner or operator shall replace, install, operate or use an underground storage tank system installed on or after August 8, 2012, unless such underground storage tank system is equipped with a new under-dispenser containment sump.

(12) On and after August 8, 2012, no owner or operator shall replace or install a piping containment sump unless such piping containment sump is a new piping containment sump.

(13) On and after August 8, 2012, no owner or operator shall replace or install an under-dispenser containment sump unless such under-dispenser containment sump is a new under-dispenser containment sump.

(14) On and after August 8, 2012, no owner or operator shall replace: (1) a dispenser and more than fifty percent of flex-joint or flexible piping, that is physically located directly beneath the dispenser, unless a new under-dispenser containment sump has been installed for such dispenser; or
(2) more than fifty per cent of the dispensers at a facility, unless a new under-dispenser containment sump has been installed for each dispenser at the facility, except that the requirement of this subdivision shall not apply to a dispenser that is replaced due to damage resulting from an accident or vandalism.

(15) Testing requirements for underground storage tank systems.

(A) (i) An UST system installed on or after December 1, 2021, shall not be used or operated until the owner or operator of such system conducts testing, in accordance with subparagraph (F) of this subdivision, to demonstrate that there is no release or loss of any liquids from any part of such system.

(ii) The owner or operator of an UST system installed on or after August 8, 2012, but before December 1, 2021, shall conduct testing, in accordance with subparagraph (F) of this subdivision, to demonstrate that there is no release or loss of any liquids from any part of such system. The testing required by this clause shall be conducted no later than 3 years after the date the last test was, or should have been conducted, or December 1, 2022, whichever is later.

(iii) The owner or operator of an UST system installed before August 8, 2012, shall conduct testing, in accordance with subparagraph (F) of this subdivision, to demonstrate that there is no release or loss of any liquids from any part of such system, provided such testing does not need to include a piping containment sump or under dispenser containment sump unless such sumps meet the requirements of a new piping containment sump or a new under-dispenser containment sump. The testing required by this clause shall be conducted no later than December 1, 2022.

(B) No later than 3 years after the date for conducting testing required by subparagraph (A) of this subdivision, and at least once every 3 years thereafter, the owner or operator of an UST system shall conduct testing, in accordance with subparagraph (F) of this subdivision, to demonstrate that there is no release or

loss of any liquids from any part of such system. The testing required by this subparagraph, for UST systems installed before August 8, 2012, does not need to include a piping containment sump or under dispenser containment sump unless such sumps meet the requirements of a new piping containment sump or a new under-dispenser containment sump.

(C) Any such owner or operator shall cease using or operating an UST system if any test conducted pursuant to subparagraphs (A) or (B) of this subdivision fails to demonstrate that there is no release or loss of any liquids from any part of such system. Such owner or operator shall not resume using or operating such UST system until subsequent testing, in accordance with subparagraph (F) of this subdivision, demonstrates that there is no release or loss of any liquids from any part of such system.

(D) Any such owner or operator of an UST system equipped with secondary containment systems with continuous monitoring that automatically monitors the integrity of both primary and secondary containment, such as systems that are hydrostatically monitored or under constant vacuum, is exempt from the testing required by subparagraphs (A) and (B) of this subdivision.

(E) The owner or operator of an UST system shall maintain the results of all testing to demonstrate compliance with this subdivision in accordance with the requirements of section 22a-449(d)-103(c)(4) of the Regulations of Connecticut State Agencies. The owner or operator may store and retrieve electronically the results of all such testing. The owner or operator shall provide such results to the commissioner upon request. The results shall be provided to the commissioner within the time frame specified in any such request, but if no time frame is specified, no later than 30 days after any such request.

(F) Except as is specified in this subdivision for UST systems installed before August 8, 2012, any test conducted to satisfy the requirements of this subdivision shall be capable of determining if there is a release or any loss of liquids from any part of the UST system, including, but not limited to, any part of a new piping containment sump and a new under- dispenser containment sump. The owner or operator shall use a qualified individual or company who has the expertise to perform and document the results of the testing required by this subdivision and shall ensure that the tests required by this subdivision use the best available technology or that such tests are conducted in accordance with the manufacturer’s guidelines and standards. If there are no manufacturer’s guidelines or standards, the owner or operator shall ensure that such tests are conducted in accordance with an applicable method specified in an industry code or engineering standard. If there are no applicable manufacturer’s guidelines or standards, industry codes, or engineering standards, the owner or operator shall ensure that such tests using a test method that, before use, is approved by a registered professional engineer licensed in the state of Connecticut. If the commissioner deems any of the foregoing test methods to be unacceptable, the commissioner shall post on the department’s internet website a list of such unacceptable test methods.

(16) If an alarm, sensor or similar device in a new under-dispenser containment sump or a new piping containment sump indicates that liquid is present in such sump, the owner or operator of such sump shall (A) immediately investigate to determine if liquid is present and identify the cause for the presence of such liquid; (B) immediately take corrective measures in accordance with all applicable federal, state, and local requirements; (C) remove all petroleum from such sump not later than twenty-four hours after any alarm or similar device indicates that liquids are present in such sump; and (D) remove all other liquids, including but not limited to, water, from such sump not later than seventy-two hours after any alarm or similar device indicates that liquids are present in such sump. Any liquids removed from any such containment sump shall be managed and disposed of in accordance with all applicable requirements.

(17) No person, including but not limited to an owner or operator, shall remove, disable or otherwise render inoperable any sensor in a new under-dispenser containment sump or new piping containment sump or any alarm or other device used to indicate whether liquids are present in any such sump. No owner or

operator shall dispense petroleum or any hazardous substances from an underground storage tank system equipped with a new under-dispenser containment sump or a new piping containment sump if any sensor in such sump, or any alarm or other device used to indicate whether liquids are present in any such sump, is removed, disabled or otherwise inoperable.

(18) The requirements of this subsection regarding an under-dispenser containment sump shall not apply to an underground storage tank system that does not have a dispenser.

(b) Notification requirements.

(1) Any owner or operator of an UST system shall give notice to the commissioner in accordance with this subsection.

(2) By May 8, 1986, the owner or operator of each petroleum UST system, the construction or installation of which began prior to November 1, 1985, shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 of these regulations.

(3) Within 180 days of the effective date of these regulations, the owner or operator of each hazardous substance UST system, the construction or installation of which began prior to the effective date of these regulations, shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 these regulations.

(4) Within thirty (30) days following the completion of installation of a petroleum UST system, the construction or installation of which begins on or after November 1, 1985, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another; an owner or operator shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 of these regulations.

(5) Within thirty (30) days following the completion of installation of a hazardous substance UST system, the construction or installation of which began on or after the effective date of these regulations, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another; an owner or operator shall notify the commissioner and the office of the local fire marshal of the results of the life expectancy determination required by section 22a-449 (d)-111 of these regulations.

(6) The notification required by subdivisions 22a-449 (d)-102 (b) (2), (3), (4), and (5) of these regulations shall include but not be limited to the following: UST system location and capacity, date of installation, contents, type of UST system, and type of monitoring systems, if any, results of life expectancy determinations, and other information which the commissioner deems necessary.

(7) By May 8, 1986, the owner or operator of an abandoned or temporarily out-of-service UST system shall notify the commissioner of the location, type, and capacity of such UST system and the date it was abandoned or removed from service.

(8) An owner or operator of a UST system shall notify the commissioner in writing within thirty (30) days when a UST system is abandoned or rendered temporarily out-of-service.

(9) No person or municipality shall use or operate a temporarily out-of-service UST system without giving prior written notice to the commissioner that such UST system shall be used or operated.

(10) Within thirty (30) days of completion of a tank tightness test or line tightness test required by sections 22a-449 (d)-101 through 22a-449 (d)-113 of these regulations, the owner or operator shall notify the commissioner and the office of the local fire marshal of the result of such tightness test.

(11) Owners and operators shall report any changes in information provided in accordance with section 22a-449 (d)-102 of these regulations within thirty (30) days.

(12) Each notification required by this section shall be submitted on forms furnished or prescribed by the

commissioner.

(13) Notices required to be submitted in accordance with subsection 22a-449 (d)-102 (b) of these regulations for tanks installed after December 22, 1988 shall also provide all of the information in section VII of the form as required in subsection 22a-449 (d)-109 (x) for each tank for which notice shall be given.

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

(A) Installation of tanks and piping under subdivision 22a-449 (d)-102 (a) (8) of these regulations;

(B) Cathodic protection of steel tanks and piping under subdivisions 22a-449 (d)-102 (a) (1) and (3) of these regulations;

(C) Financial responsibility under section 22a-449 (d)-109 of these regulations; and

(D) Release detection under subsection 22a-449 (d)-104 (c) and (d) of these regulations.

(15) All owners and operators of new UST systems shall ensure that the installer certifies in the notification form that the methods used to install the tanks and piping complies with the requirements in subdivision 22a-449 (d)-102 (a) (6) of these regulations.

(16) Beginning October 24, 1988, any person who sells a tank intended to be used as an underground storage tank shall notify the purchaser of such tank of the owner's notification obligations under 40 CFR 280.22 (a). The form provided in subsection 22a-449 (d)-109 (z) of these regulations may be used to comply with this requirement.]

(1) Installation

(A) The owner or operator shall ensure that every component of an UST system is installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instruction, unless the commissioner has posted on the department's internet website that use of such code of practice is unacceptable. In addition, the commissioner may post codes of practice deemed acceptable on the department's internet website.

(B) The owner or operator shall ensure that for the installation of a tank or piping, all work listed in the manufacturer's checklist or similar document from the manufacturer regarding installation has been completed and one of the following conditions is satisfied:

(i) The manufacturer of the tank or piping, as applicable, has certified the installer, in writing, to install such equipment; or

(ii) The installation of such tank or piping has been inspected and approved, in writing, by a registered professional engineer licensed in the state of Connecticut and who has education and experience in UST tank and piping installation.

(C) Within 30 days after completion of installation of a tank or piping as part of an UST system, the owner or operator shall submit to the commissioner a certification, on a form and in a manner prescribed by the commissioner, signed by the installation contractor, certifying that the installation has been carried out in accordance with clause (i) or (ii) of subparagraph (B) of this subdivision.

(2) Installation Testing

(A) (i) No owner or operator installing an UST system on or after August 8, 2012, shall place any regulated substances into such system until the owner or operator has conducted testing that demonstrates that there is no release or loss of any liquids from any component of such system.

(ii) With the exception of a spill bucket, no owner or operator installing an UST system component on or after {insert the effective date of these regs} shall place any regulated substances or accept a delivery of regulated substances, as applicable, into such system until the owner or operator has conducted testing that demonstrates that there is no release or loss of any liquids from any component of such system.

(iii) No owner or operator installing a spill bucket on or after {insert the effective date of these regs}

shall accept a delivery of regulated substances into such system until the owner or operator has conducted testing that demonstrates that there is no release or loss of any liquids from the newly installed spill bucket.

(B) The owner or operator of an UST system shall ensure that any test conducted to satisfy the requirements of subparagraph (A) of this subdivision shall be performed in accordance with the manufacturer's guidelines and standards. If there are no manufacturer's guidelines or standards, the owner or operator shall perform such tests in accordance with an applicable method specified in an industry code or engineering standard. If there are no applicable manufacturer's guidelines or standards, industry codes, or engineering standards, the owner or operator shall perform all such tests using a test method that, before use, is approved in writing by a registered professional engineer licensed in the state of Connecticut. The owner or operator shall ensure that the person who performs the testing required by subparagraph (A) of this subdivision has the qualifications and experience to perform such testing, and the owner or operator shall maintain the results of such testing and be made available for inspection by the commissioner.

(C) Notwithstanding subparagraph (B) of this subdivision, an owner or operator shall not use a test method to comply with subparagraph (A) of this subdivision if the commissioner has posted on the department's internet website that use of test method is unacceptable. In addition, the commissioner may post test methods deemed acceptable on the department's internet website.

(3) Recordkeeping

The owner or operator of an UST system shall maintain records demonstrating compliance with the requirements of this subsection in accordance with the requirements of section 22a-449(d)-114 of the UST regulations.

(c) **Use of most stringent provision.**

If use of any manufacturer's specifications and recommendations are required under this section and such specifications or recommendations are inconsistent with any provision of this section, the provision which imposes the most stringent and protective requirement shall be required.

Sec. 22a-449(d)-103. General operating requirements

[(a) **Spill and overfill control.**

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

(2) The owner and operator shall report, investigate, and clean up any spills and overfills in accordance with subsection 22a-449 (d)-105 (d) of the Regulations of Connecticut State Agencies.

(3) The transfer procedures described in National Fire Protection Association Publication 385 may be used to comply with subdivision (1) of this subsection. Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code."

(4) Owners and operators of UST systems shall ensure that spill prevention equipment satisfies either the requirements of subparagraph (A) or (B) of this subdivision.

(A) Such system is double walled and uses continuous monitoring that automatically monitors the integrity of both walls, such as systems that are hydrostatically monitored or under constant vacuum. If an owner or operator discontinues such monitoring:

(i) No later than 30 days after such discontinuance, the owner or operator shall conduct a test specified in subparagraph (B) of this subdivision; and

(ii) During any period when such monitoring is discontinued, the owner or operator shall comply with subparagraph (B) of this subdivision; or

(B) Such system is tested using vacuum, pressure, or liquid testing, at least once every 3 years with subsequent testing no later than 3 years after the most recent previous test, to ensure the equipment is liquid tight. If this testing has not been conducted previously, the initial test required by this subparagraph shall be conducted no later than December 1, 2022. Testing required by this subparagraph shall be conducted in accordance with:

(i) Requirements developed by the manufacturer, provided the manufacturer has developed such requirements; or

(ii) A code of practice developed by a nationally recognized association or independent testing laboratory.]

The owner and operator of an UST system shall ensure compliance with the following requirements:

(a) **Operator response guidelines.** The owner or operator shall post operator response guidelines in written form at each underground storage facility in accordance with subdivisions (1) and (2) of this subsection. The operator response guidelines shall include reporting procedures for releases and suspected releases, emergency contact phone numbers, malfunctioning equipment lock-out/tag-out and notification procedures, and initial mitigation protocol for releases, suspected releases and other emergency. Such operator response guidelines shall be:

(1) Visibly posted at each unmanned underground storage facility:

(A) Where regulated substances are dispensed; and

(B) If there is no dispensing, where regulated substances are stored; and

(2) Posted for each manned underground storage facility, visually accessible in close proximity to the person manning the facility.

(b) **Monthly inspections.**

(1) Monthly inspections shall be conducted at all underground storage facilities. A monthly inspection shall not occur within 7 days of any previous monthly inspection.

(2) Monthly inspections shall be conducted by a Class B Operator, provided such Class B Operator has a working familiarity with specifics of the UST systems being inspected at the underground storage facility.

(3) The monthly inspection shall, at a minimum, include an evaluation of all items specified in the "UST Monthly Inspection Checklist" posted on the department's internet website. Any such inspection shall be performed in a manner that is in conformance with the 2021 version of the Petroleum Equipment Institute RP-900, "Recommended Practices for the Inspection and Maintenance of UST Systems" unless the commissioner has posted on the department's internet website that use of such practice, or a portion thereof, is unacceptable and has posted an alternative.

(4) The findings of each monthly inspection shall be recorded on the "UST Monthly Inspection Checklist" and when signed by the Class B operator shall become the inspection report. For each item, the inspector shall inspect the item and record on the inspection report either "pass" or "fail" to reflect the status of the item inspected. For any item that is not in compliance with applicable requirements or for which a "fail" status has been recorded, the owner or operator shall take all actions necessary to correct such failure or non-compliance and the inspection report shall note the actions that have been or will be taken. Any action taken in response to an inspection shall be performed as soon as possible, but if such action will take longer than 30 days after discovery of the need for such action, an explanation of why such action will take longer than 30 days shall be noted in the inspection report.

(5) The results of each monthly inspection shall be maintained at the underground storage facility for a period of no less than 3 years from the date of such inspection.

(c) **Annual inspections.**

(1) Annual inspections shall be conducted at all underground storage facilities. An annual inspection shall occur within 90 days of the one-year anniversary date of the previous annual inspection.

(2) Annual inspections shall be conducted by an independent third-party qualified and with experience performing such inspections. Such individual shall meet the qualification requirements set forth in the 2021 version of the Petroleum Equipment Institute RP-900, "Recommended Practices for the Inspection and Maintenance of UST Systems".

(3) Annual inspections shall, at a minimum, include an evaluation of the items specified in the "UST Annual Inspection Checklist" posted on the department's internet website. Any such inspection shall be performed in accordance with the 2021 version of the Petroleum Equipment Institute RP-900, "Recommended Practices for the Inspection and Maintenance of UST Systems" and any applicable manufacturer's instructions, unless the commissioner has posted on the department's internet website that use of such practice or instructions, or a portion thereof, is unacceptable and has posted an alternative.

(4) The findings of each annual inspection shall be recorded on the "UST Annual Inspection Checklist" and when signed by the individual who conducted the inspection, shall become the inspection report. For each item, the inspector shall inspect the item and record on the inspection report either "pass" or "fail" to reflect the status of the item inspected. For any item that is not in compliance with applicable requirements or for which a "fail" status has been recorded, the owner or operator shall take all actions necessary to correct such failure or non-compliance and the inspection report shall note the actions that have been or will be taken. Any action taken in response to an inspection shall be performed as soon as possible, but if such action will take longer than 30 days after discovery of the need for such action, an explanation of why such action will take longer than 30 days shall be noted in the inspection report.

(5) The results of each annual inspection shall be maintained at the underground storage facility for a period of not less than 3 years from the date of such inspection.

(d) **Tanks and piping.** The owner or operator of an UST system shall ensure compliance with the following requirements:

(1) Prevent the release or loss of liquid from any part of a tank and connected piping and maintain all such tanks and connected piping in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions. If use of any manufacturer's specifications and recommendations are required under this section and such specifications or recommendations are inconsistent with any provision of this section, the provision which imposes the most stringent and protective requirement shall be required.

(2) Except as provided for in subsection (f) of this section, each double-walled UST and double-walled connected piping shall be tested to determine if there is a release or any loss of liquids from any part of such tank or piping, as applicable. The test required by this subdivision shall:

(A) Be performed in accordance with the manufacturer's specifications. If there are no manufacturer's specifications, the owner or operator shall perform such test in accordance with an applicable method specified in an industry code or engineering standard. If there are no applicable manufacturer's specifications, industry codes, or engineering standards, the owner or operator shall perform such tests using a test method that, before use, is approved by a registered professional engineer licensed in the state of Connecticut;

(B) Be performed by a qualified individual or company who has the training and experience to perform and document the results of such testing; and

(C) Beginning {insert the effective date of the UST regulations}, such testing shall be performed not later than 3 years after the date of the previous test or the date of installation of the tank and piping, as applicable,

whichever date is later, and once every 3 years thereafter, provided that for any testing performed to comply with this subdivision, there is at least one year between tests.

(e) **Spill buckets and containment sumps**. The owner or operator of an UST system shall ensure compliance with the following requirements:

(1) Any liquid that accumulates in any part of a spill bucket or containment sump remains in such spill bucket or containment system, such that there is no release or loss of liquids.

(2) Except as provided for in subsection (f) of this section, all spill buckets and containment sumps shall be tested to determine whether any liquid that may accumulate in such sump or spill bucket is prevented from leaving such sump or spill bucket. The test shall:

(A) Be performed in accordance with the manufacturer's specifications. If there are no manufacturer's specifications, the owner or operator shall perform such test in accordance with an applicable method specified in an industry code or engineering standard. If there are no applicable manufacturer's specifications, industry codes, or engineering standards, the owner or operator shall perform such tests using a test method that, before use, is approved by a registered professional engineer licensed in the state of Connecticut;

(B) Be performed by a qualified individual or company who has the training and experience to perform and document the results of such testing; and

(C) Beginning {insert the effective date of the UST regulations}, be performed not later than 3 years after the date of the previous test or the date of installation, whichever date is later, and once every 3 years thereafter, provided that for any testing performed to comply with this subdivision there is at least one year between tests.

(f) **Provisions applicable to testing.** The following shall apply to testing required by subsections (d) and (e) of this section:

(1) The testing shall not be required for a double-walled UST system component using continuous monitoring that automatically monitors both the primary and secondary containment of such tank system, such as systems that are hydrostatically monitored or under constant vacuum; and

(2) Notwithstanding subsections (d)(2) and (e)(2) of this section, an owner or operator shall not use a test method to comply with this subsection if the commissioner has posted on the department's internet website that use of such test method is unacceptable. In addition, the commissioner may post test methods deemed acceptable on the department's internet website.

(g) **Overfill prevention equipment.** The owner or operator of an UST system shall ensure compliance with the following requirements:

(1) An UST system's overfill prevention equipment shall:

(A) Automatically shut off flow into an UST when such UST is no more than 95 percent full; or

(B) Alert the transfer operator when an UST is no more than 90 percent full by triggering a high-level alarm that is both audible and visual.

(2) Overfill prevention equipment shall be tested to determine if such equipment will activate as specified in subdivision (1) of this subsection.

(A) The test required by this subdivision shall:

(i) Be performed in accordance with the testing specified in the 2021 version of the Recommended Practices of the Petroleum Equipment Institute RP-900, "Recommended Practices for the Inspection and Maintenance of UST Systems";

(ii) Be performed by a qualified individual or company who has the training and experience to perform and document the results of such testing; and

(iii) Be conducted annually, provided that for the testing to comply with this subdivision, there is at least 9

months between tests.

(B) An owner or operator shall not use a test method to comply with this subdivision if the commissioner has posted on the department's internet website that use of such test method is unacceptable. In addition, the commissioner may post test methods deemed acceptable on the department's internet website.

[(b)] (h) **Operation and maintenance of corrosion protection.** The owner or operator of an UST system shall ensure compliance with the following requirements:

[All owners and operators of steel UST systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented for the operational life of the UST system:]

(1) All corrosion protection systems shall be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the [tank and piping] UST that routinely contain regulated substances and are in contact with the ground or water. Such corrosion protections shall, at a minimum, be maintained continuously at least minus 0.85 volts, measured between the structure and a copper-copper sulfate electrode.

[(2) All UST systems equipped with cathodic protection systems shall be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(A) Frequency. All cathodic protection systems shall be tested within six months of installation and at least annually thereafter or according to another reasonable time frame established by the implementing agency; and

(B) Inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section shall be in accordance with a code of practice developed by a nationally recognized association. A structure to soil test voltage reading of a least minus 0.85 volts measured between the structure and a copper-copper sulfate electrode shall be maintained. Voltage drops other than those across the structure electrolyte boundary shall be considered for valid interpretation of the voltage measurements. Other cathodic protection criteria may be used upon written approval of the commissioner.]

(2) Cathodic protection systems shall be tested by measuring the voltage between the structure and a copper-copper sulfate electrode. A passing test shall be at least minus 0.85 volts measured between the structure and a copper-copper sulfate electrode. Voltage drops other than those across the structure electrolyte boundary shall be considered for valid interpretation of the voltage measurements. Such test shall be performed:

(A) In accordance with a code of practice developed by a nationally recognized association;

(B) By a qualified cathodic protection tester who can document the results of such testing. A qualified 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 metal piping and UST systems in contact with soil or water. At a minimum, such persons shall 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; and

(C) Within 6 months of installation and once a year thereafter, provided that there is at least 9 months between tests.

[(3) UST systems with impressed current cathodic protection systems shall also be inspected every thirty days to ensure the equipment is running properly and a monthly record of rectifier current and voltage output shall be maintained in accordance with subsection 22a-449 (d)-103 (c) of these regulations.

(4) For UST systems using cathodic protection, records of the operation of the cathodic protection shall be maintained (in accordance with subsection 22a-449 (d)-103 (c) of these regulations) to demonstrate compliance with the performance standards in subsection 22a-449 (d)- 103 (d) of these

regulations. These records shall provide the following:

(A) The results of all inspections required in subdivision 22a-449 (d)-103 (b) (3) of these regulations; and

(B) The results of testing from all inspections required in subdivision 22a-449 (d)-103 (b) (2) of these regulations.

(5) If any cathodic protection system malfunctions or fails to meet the above structure to soil test voltage requirement, it shall be immediately repaired. Anodes shall be replaced when all other corrective measures which have been taken are not sufficient to maintain the structure to soil test voltage of at least minus 0.85 volts.

(6) National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," may be used to comply with subparagraph 22a-449 (d)-103 (b) (2) (B).]

(i) **Metallic piping.** The owner or operator of an UST system with metallic piping that is not cathodically protected shall prevent such piping from coming into direct contact with the ground or any water for the operational life of such piping. This requirement does not apply to metallic piping that is not designed to routinely contain regulated substances.

(j) **Maintaining proper operability.** The owner or operator of an UST system shall ensure that the UST system components specified in sections 22a-449(d)-102, 22a-449(d)-103 and 22a-449(d)-104 of the UST regulations:

(1) Remain in good working order and operate properly and if a repair is needed, such repair shall be promptly made in compliance with subsection (m) of this section; and

(2) Are not disabled or rendered inoperable. This includes ensuring water does not accumulate in the spill buckets and such buckets remain clean and dry, and that automatic shut-off equipment is not disabled during the filling of an UST;

(k) **Transfer of liquids.** The owner or operator of an UST system shall ensure that the transfer of regulated substances into a tank is constantly monitored and that releases, such as spills or overfills, do not occur during any such transfer. The owner or operator shall ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

[(c)] (*l*) **Compatibility.**

(1) [Owners and operators]The owner or operator of an UST system shall only use an UST system that is made of materials that are compatible with [any] the regulated substance which is stored in such system. This requirement shall apply to the entirety of an UST system.

(2) (A) The owner or operator of an UST system storing greater than [ten (]10[)] percent ethanol or greater than [twenty (]20[)] percent biodiesel shall demonstrate that such [regulated] substances are compatible with the [tank, piping, new piping containment sumps, new under-dispenser containment sumps, pumping equipment, release detection equipment, and spill and overfill equipment parts of an] UST system [using one of the following options] by:

(i) Certification or listing of the UST system [equipment or] components by a nationally recognized independent testing laboratory for use with such regulated substances; or

(ii) An affirmative statement of compatibility in writing from the equipment or component manufacturer that specifies the range of biofuel blends with which the [equipment or] UST system component is compatible[.]; and

(iii) Documentation from the manufacturer indicating that the regulated substances stored in such UST system are compatible with the UST system.

(B) Documentation demonstrating compliance with the requirements of subparagraph (A) of this subdivision

shall be maintained in accordance with [subsection (c)(4)] section 22a-449(d)-114 of [this section]the UST regulations.

[(d)] (m) **Repairs[allowed].**

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

(1) Repairs to UST systems shall be properly conducted in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory provided that such codes and standards are no less stringent and protective than the requirement in NFPA 30.

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

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

(4) Repaired tanks and piping shall be tightness tested in accordance with sections 22a-449(d)-104(c)(3) and 22a-449(d)-104(f)(2) of the Regulations of Connecticut State Agencies within thirty days following the date of the completion of the repair except as provided in subdivisions (1), (2), and (3) of this subsection:

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

(B) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in sections 22a-449 (d)-104 (4), (5), (6), and (7) of the Regulations of Connecticut State Agencies; or

(C) Another test method is used that is determined by prior written approval of the implementing agency to be no less protective of human health and the environment than those listed in this subdivision.

(5) Within six months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with subsections (b)(2) and (b)(3) of this section to ensure that it is operating properly.

(6) No later than 30 days following any repair to spill prevention equipment, the repaired equipment shall be tested to ensure that the equipment is liquid tight. The testing shall be done using vacuum, pressure, or liquid in accordance with:

(A) Requirements developed by the manufacturer of the spill prevention equipment, provided the manufacturer has developed such requirements; or

(B) A code of practice developed by a nationally recognized association or independent testing laboratory.

(7) No later than 30 days following any repair to overfill prevention equipment, the repaired equipment shall be inspected to ensure that the equipment is set to activate at the correct level specified in section 22a-449(d)-102(a)(5)(A)(ii) of the Regulations of Connecticut State Agencies and will activate when regulated substances reach such level. Any such inspection shall be conducted in accordance with:

(A) Requirements developed by the manufacturer of such equipment, provided the manufacturer has developed such requirements; or

(B) A code of practice developed by a nationally recognized association or independent testing laboratory.

(8) (A) If a new under-dispenser containment sump is repaired, the repaired sump and the dispenser associated with such sump shall not be returned to service until the owner or operator conducts a test, in accordance with section 22a-449(d)-102(a)(15)(F) of the Regulations of Connecticut State Agencies, that

demonstrates that the repaired sump meets the requirements of a new under-dispenser containment sump. Any such test shall be conducted no later than 30 days following the date the repairs were completed.

(B) If a new piping containment sump is repaired, the repaired sump and the piping associated with such sump shall not be returned to service until the owner or operator conducts a test, in accordance with section 22a-449(d)-102(a)(15)(F) of the Regulations of Connecticut State Agencies, that demonstrates that the repaired sump meets the requirements of a new piping containment sump. Any such test shall be conducted no later than 30 days following the date the repairs were completed.

(9) UST system owners and operators shall maintain records that demonstrate compliance with the requirement of this subsection of each repair to an UST system. Such records shall be maintained for at least five years beyond the operational life of such system.

(10) Repairs to UST systems shall be properly conducted in accordance with National Fire Protection Association Standard 30 and the performance standards in subsection 22a- 449(d)-102(a) of the Regulations of Connecticut State Agencies.

(11) The following codes and standards may be used to comply with subdivision (1) of this subsection: National Fire Protection Association Standard 30, ″Flammable and Combustible Liquids Code″; American Petroleum Institute Publication 2200, ″Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines″; American Petroleum Institute Publication 1631, ″Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks″; and National Leak Prevention Association Standard 631, ″Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection.″]

(1) General Requirement. Except for the UST system components specified in this subsection, the owner or operator shall immediately repair any UST system component in need of repair. All such repairs shall comply with the requirements of this subsection, as applicable.

(2) Specific Equipment That Can Only Be Repaired Under Certain Conditions. An owner or operator of an UST system shall only make repairs to the following equipment if the requirements of this subdivision are satisfied:

(A) For cathodic protection equipment, only if such equipment passed the cathodic protection test required by subsection (h)(2) of this section within the previous 5 years;

(B) For a containment sump, only if such repairs performed after {insert effective date of Regulations} result in the sump meeting the requirements of section 22a-449(d)-102(a)(5)(C) of the UST regulations;

(C) For single-walled fittings or pipe sections, only if such fitting or pipe section is 3 feet or less. The replacement of fittings or pipe sections of greater than 3 feet is permitted if the replacement piping or fitting is in compliance with section 22a-449(d)-102 of the UST regulations; and

(D) For a fiberglass-reinforced plastic tank, only if such repair is made by the manufacturer’s authorized representative.

(3) Equipment That Cannot Be Repaired. An owner or operator of an UST system shall not repair, but shall immediately discontinue use and permanently close the following UST system components in accordance with section 22a-449(d)-107 of the UST regulations:

(A) A tank that is comprised of steel or of a composite that includes steel; or

(B) A tank or piping that does not pass the annual cathodic protection test required by subsection (h)(2) of this section and the owner or operator of such tank or piping cannot demonstrate that such tank or piping has passed such test within the 5 years prior to such failed test.

(4) Requirements for Conducting Repairs.

(A) (i) Once it is determined that an UST system or UST system component needs repair, and such repair

is permitted to be made in accordance with this section, the owner or operator of such UST system or UST system component shall ensure that:

(I) No regulated substances are delivered to such UST system if there is a release from such system or if the delivery of a regulated substance to such system could result in a release;

(II) No regulated substances are dispensed from such UST system if dispensing such substances could result in a release; and

(III) If the repair is to a tank associated with such UST system or piping that routinely contains regulated substances, any regulated substances are immediately emptied from such UST system prior to the repair.

(ii) The requirements of this subparagraph shall remain in effect until the UST system or UST system component is successfully repaired and passes the applicable test, in accordance with the requirements of subparagraphs (B) and (C) of this subdivision.

(B) The owner or operator shall ensure that all repairs allowed by this section are conducted in accordance with the manufacturer's specifications, a code of practice developed by a nationally recognized association or an independent testing laboratory.

(C) (i) Immediately after a repair, the owner or operator shall ensure that the repaired UST system or UST system component passes a test specified in this subparagraph prior to being put back into service:

(I) For a repair to a single-walled non-metallic tank associated with an UST system, a tank tightness test capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table;

(II) For a repair to single-walled piping, a tightness test capable of detecting a 0.1 gallon per hour leak rate at one and one-half times the operating pressure of such piping;

(III) For a repair to a double-walled tank associated with an UST system or double-walled piping, a test of the interstitial space in such tank or piping demonstrating that there is no release or loss of liquid from either the primary or the secondary containment of such tank or piping, as applicable;

(IV) For a repair to a cathodic protection system, a test conducted in accordance with subsection (h)(2) of this section;

(V) For a repair to spill prevention equipment, a test to determine if the equipment is liquid tight by using vacuum, pressure, or hydrostatic testing. Before use of such test, if requested, the commissioner may approve in writing, another test method;

(VI) For any repair to overfill prevention equipment, release detection equipment or the shear valve or crash valve on a dispenser, a test of functionality to ensure that the equipment is functioning properly; and

(VII) For a repair to a piping containment sump or under-dispenser containment sump, a test to determine that the repaired sump meets the requirements of section 22a-449(d)-102(a)(5)(C) of the UST regulations.

(ii) The owner or operator of an UST system shall ensure that any test conducted to satisfy the requirements of subparagraph (B) of this subdivision shall be performed in accordance with the manufacturer's specifications. If there are no manufacturer specifications, the owner or operator shall perform such tests in accordance with an applicable method specified in an industry code or engineering standard. If there are no applicable manufacturer specifications, industry codes, or engineering standards, the owner or operator shall perform such tests using a test method that, before use, is approved in writing, by a registered professional engineer licensed in the state of Connecticut. The owner or operator shall ensure that the person who performs the testing required by subparagraph (B) of this subdivision has the qualifications and expertise to perform such testing and the owner or operator shall maintain the results of such testing in accordance with section 22a-449(d)-114 of the UST regulations.

(iii) Notwithstanding subparagraph (B) of this subdivision, an owner or operator of an UST system shall not use a test method to comply with subparagraph (A) of this subdivision if the commissioner has posted on the department's internet website that the use of a test method is unacceptable. In addition, the commissioner may post test methods deemed acceptable on the department's internet website.

(5) Requirements Regarding Removal or Replacement of Containment Sumps and Spill Buckets

(A) Whenever a containment sump or spill bucket is removed or replaced, for any reason, the owner and operator shall ensure that:

(i) A person, with the training specified in this subparagraph, is present at the underground storage facility to oversee such removal or replacement. Such person, before such removal or replacement, shall have:

(I) Received certification of successful completion of training in accordance with 29 CFR 1910.120(e) and as applicable, annual refresher training required in accordance with 29 CFR 1910.120(e)(8); and

(II) Successfully passed an examination listed on the department's internet website, such as the International Code Council Decommissioning Exam U2.

(ii) The containment sump or spill bucket, as applicable, is emptied and cleaned by removing all liquids and accumulated sludges in accordance with a code of practice developed by a nationally recognized association. After removal of such liquids and sludges, the containment sump, or spill bucket, as applicable, shall be removed from the ground.

(iii) (I) An assessment is performed in accordance with this subparagraph not later than 5 days after the containment sump, or spill bucket, as applicable, has been removed from the ground in accordance with section 22a-449(d)-107 of the UST regulations. The assessment shall include an evaluation of the presence of a release or potential release at all locations where contamination is most likely to be present. At a minimum, this assessment shall be adequate to determine if there is a release or potential release in the area where the containment sump or spill bucket, as applicable, has been removed. The selection of sample types, sample locations, and analytical methods, shall take into account: the nature of the stored substance, the type of backfill, the depth to ground water, the presence of rainwater or groundwater, and other factors appropriate for identifying the presence, or potential presence, of a release;

(II) Only a person with a minimum of 3 years of experience and training in selecting and taking samples can undertake the assessment required by this subparagraph. Sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory that is either certified by the Connecticut Department of Public Health or approved in writing by the commissioner; and

(III) All analytical data used to comply with this section shall be scientifically valid and defensible, with a level of precision, accuracy, and sensitivity commensurate with its intended use. All analytical data shall include an analytical data quality assessment and data usability evaluation prepared by an individual qualified to make such assessment or evaluation. If the commissioner determines that analytical data is not scientifically valid and defensible, or is not of a sufficient level of precision, accuracy, and sensitivity to support the intended use of the data, the commissioner shall identify in writing the reasons for such conclusions and such data shall not be relied upon to demonstrate compliance with this section.

(B) If any time during the replacement of a containment sump or spill bucket, as applicable, a release is:

(i) Suspected, the owner or operator of the UST system shall comply with section 22a-449(d)-105 of the UST regulations; or

(ii) Confirmed, the owner or operator of the UST system shall comply with section 22a-449(d)-106 of the UST regulations.

(C) Sump or Spill Bucket Removal or Replacement Report. Not later than 30 days after completing the sampling necessary for the assessment required by subdivision (5)(A)(iii) of this subsection, the

owner or operator of the UST system shall ensure that a detailed report is prepared regarding the removal or replacement of a containment sump or spill bucket, as applicable. Such report shall include at a minimum:

(i) A description of the underground storage facility, including any UST systems in use and general characteristics of the area in which the facility is located;

(ii) A detailed description of the replacement or removal activities undertaken;

(iii) A detailed description and justification for the sample locations, sample depths, analytical methods used, and quality assurance/quality control measures taken;

(iv) A detailed analysis of the analytical results. This analysis shall include:

(I) All sampling results and a justification for disregarding or not using any sampling results;

(II) A description of the distribution and concentration of any substances in soil or groundwater that may have been released from the underground storage facility;

(III) A description of the general characteristics of soil in the vicinity of the underground storage facility;

(IV) A map to scale showing the extent and concentration of all releases;

(V) The tabulated analytical results of all laboratory analysis of soil and groundwater;

(VI) A description of the experience and training of the person undertaking the assessment required by subsection (m)(5) of this section; and

(VII) Any other information specified by the commissioner.

(D) The report required under subdivision (5)(C) of this subsection shall be submitted to the commissioner on a form and in a manner specified by the commissioner:

(i) If the results of the assessment undertaken pursuant to subdivision (5)(A) of this subsection indicate an exceedance of any applicable criterion of the RSRs or the release or potential release of a substance for which there is no criterion under the RSRs; or

(ii) Upon request by the commissioner within the time frame specified in any such request. If no time frame is specified in the request, the report shall be provided not later than 30 days after receipt of the commissioner's request.

(n) **Additional activities.**

If the activities undertaken pursuant to this section are not satisfactory to the commissioner, the commissioner shall notify the owner or operator in writing, identifying what the commissioner deems unsatisfactory, the reasons why and what additional actions are necessary. The owner or operator shall undertake any actions requested by the commissioner within the time frame specified by the commissioner. If no time frame is specified in any such request, the requested actions shall be undertaken not later than 60 days from the date of any such request.

(o) **Cooperation.**

The owner and operator of an UST system shall cooperate fully with any inspection, monitoring and testing conducted by the Department, as well as any request for document submission, testing, and monitoring by the owner or operator pursuant to the UST regulations and any applicable Connecticut General Statute administered by the commissioner.

[(e)] (p) [**Reporting and record keeping.**] **Recordkeeping.**

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

(1) Reporting. Owners and operators shall submit the following information to the implementing agency:

(A) Notification for all UST systems (subsection 22a-449 (d)-102 (b) of these regulations), which

includes certification of installation for new UST systems (subdivision 22a-449 (d)-102 (a) (8) of these regulations),

(B) Reports of all releases including suspected releases (subsection 22a-449 (d)-105 (a) of these regulations), spills and overfills (subsection 22a-449 (d)-105 (d) of these regulations), and confirmed releases (subsection 22a-449 (d)-106 (c) of these regulations);

(C) Corrective actions planned or taken including initial abatement measures (subsection 22a-449 (d)-106 (d) of these regulations), initial site characterization (subsection 22a-449 (d)-106 (e) of these regulations), free product removal (subsection 22a-449 (d)-106 (f) of these regulations), investigation of soil and ground-water cleanup (subsection 22a-449 (d)-106 (h) of these regulations), and corrective action plan (subsection 22a-449 (d)-106 (i) of these regulations); and

(D) A notification before permanent closure or change-in-service (subsection 22a-449 (d)-107 (b) of these regulations).

(E) An owner or operator of an UST system shall report any failure to the commissioner immediately, in accordance with section 22a-450 of the general statutes, as amended.

(2) Record keeping. Owners and operators shall maintain the following records:

(A) Documentation of operation of corrosion protection equipment (subsection (b) of this section);

(B) Documentation of UST system repairs (subsection (d)(9) of this section);

(C) Documentation of compliance with release detection requirements (section 22a-449(d)-104(g) of the Regulations of Connecticut State Agencies);

(D) Results of the site investigation conducted at permanent closure (section 22a-449 (d)-107(e) of the Regulations of Connecticut State Agencies);

(E) Documentation of compliance with the requirements in section 22a-449 (d)-102(a)(9) of the Regulations of Connecticut State Agencies; and

(F) Documentation of compliance with the requirements in subsection (a)(4) of this section regarding spill prevention equipment.

(3) The owner or operator of an UST system shall assure the maintenance of up-to-date records of significant construction or installation activities; monitoring; substantial modifications; abandonment, removal, or replacement of UST system components or protective devices for such components; and any other activity required by an order of the commissioner. The owner or operator shall review such records and attest to their accuracy by signing them no later than seven days following the completion of the recorded activity.

(4) Availability and Maintenance of Records. Owners and operators shall keep and maintain the records required by these regulations for at least five years beyond the operational life of the UST system either:

(A) At the UST site and immediately available for inspection by the implementing agency; or

(B) For records greater than five (5) years old or with prior written approval by the commissioner at a readily available alternative site and be immediately provided for inspection to the implementing agency upon request.]

For purposes of section 22a-449q of the Connecticut General Statutes, the records required to be maintained pursuant to section 22a-449(d)-103 of the UST regulations shall be those specified in section 22a-449(d)-114(b) of the UST regulations.

Sec. 22a-449(d)-104. Release detection

[(a) **General requirements for all UST systems.**

(1) Owner and operators of new and existing UST systems shall provide a method, or combination of

methods, of release detection that:

(A) Can detect a release from any portion of the tank and the connected underground piping except vent and vapor recovery piping unless such vent and vapor recovery piping routinely contains product;

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

(C) Meets the performance requirements in subsections 22a-449 (d)-104 (e) or (f) of these regulations, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, methods used after the date shown in the following table corresponding with the specified method except for methods permanently installed prior to that date, shall be capable of detecting the leak rate or quantity specified for that method in the corresponding section of the rule (also shown in the table) with a probability of detection (Pd) of 0.95 and a probability of false alarm (Pfa) of 0.05.

Method	**Subdivision of this section 22a-449 (d)-104**	**Date after which Pd/PFA must be demonstrated**
Manual Tank Gauging.	(e) (2)	December 22, 1990.
Tank Tightness Testing.	(e) (2)	December 22, 1990.
Automatic Tank Gauging.	(e) (4)	December 22, 1990.
Leak Detectors. . . .	(f) (1)	September 22, 1991.
Automatic Line Line Tightness Testing.	(f) (2)	December 22, 1990.

(2) When a release detection method operated in accordance with the performance standards in subsections 22a-449 (d)-104 (e) and (f) of these regulations indicates a release may have occurred, owners and operators shall notify the implementing agency in accordance with section 22a-449 (d)- 105 of these regulations.

(3) Owners and operators of all UST systems shall comply with the release detection requirements of section 22a-449 (d)-104 of these regulations by December 22 of the year listed in the following table:

Schedule for Phase-in of Release Detection

Year system was installed	*Year when release detection is required (by December 22nd of the year indicated)*				
	1989	1990	1991	1992	1993
Before 1965 or date unknown	RD	P			
1965-69		P/RD			
1970-74		P	RD		
1975-79		P		RD	
1980-88		P			RD

New tanks (after December 22) immediately upon installation.

P = Shall begin release detection for all pressurized piping as defined in subdivision 22a-449 (d)- 104 (c) (2) (A) of these regulations.

RD = Shall begin release detection for tanks and suction piping in accordance with subdivisions 22a-449(d)-104 (c) (1), (c) (2) (B) and subsection 22a-449(d)-104 (d) of these regulations.

(4) Any existing UST system that cannot apply a method of release detection that complies with the requirements of section 22a-449 (d)-104 of these regulations shall complete the closure procedures in section 22a-449 (d)-107 of these regulations by the date on which release detection is required for that UST system under subdivision 22a-449 (d)-104 (a) (3) of these regulations.

(b) **Additional Requirements**

(1) Failure determination. On and after the effective date of RCSA section 22a-449 (d)-104 the owner and operator of an UST system which was regulated under RCSA section 22a-449 (d)-1 prior to the effective date of these regulations, shall perform and report failure determinations in accordance with RCSA section 22a-449 (d)-1 until the date that release detection is provided and performed in accordance with all the requirements in subsection 22a-449 (d)-104 (c) of these regulations including any tightness testing that is required thereunder.

(2) Tank tightness test. In addition to the tank testing requirements in these regulations, the owner or operator of a fiberglass-reinforced plastic UST system shall conduct a tank tightness test in accordance with subdivision 22a-449 (d)-104 (e) (3) of these regulations within three to six months after the installation of such system.

(3) Inventory.

(A) On and after the effective date of RCSA section 22a-449 (d)-104 the owner and operator of an UST system which was regulated under RCSA section 22a-449 (d)-1 prior to the effective date of these regulations, shall perform and maintain daily inventory records in accordance with RCSA section 22a-449 (d)-1 including, but not limited to, the confirmation and reporting of an abnormal loss or gain until the date that release detection is provided and performed in accordance with all the requirements in subsection 22a-449 (d)-104 (c) of these regulations including any monthly inventory control that is required thereunder.

(B) The commissioner may require an owner or operator to perform a failure determination, in accordance with RCSA section 22a-449 (d)-1, of any UST system for which daily inventory records are not maintained in accordance with this subdivision.

(c) **Requirements for petroleum UST systems.**

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

(1) Tanks. Daily measurements for any water level in the bottom of the tank shall be made to the nearest one-eighth of an inch and recorded, except such measurements for water are not required for double wall tanks with interstitial monitoring performed in accordance with section 22a-449 (d)-104 these regulations. Tanks shall be monitored at least every thirty (30) days for releases using one of the methods listed in subdivisions 22a-449 (d)-104 (e) (4), (5), (6), (7) and (8) of these regulations except that:

(A) UST systems that meet the performance standards in subsection 22a-449 (d)-102 (a) of these regulations and the monthly inventory control requirements in subdivisions 22a-449 (d)-104 (e) (1) or (2) of these regulations may use tank tightness testing, conducted in accordance with subdivision 22a- 449 (d)-104 (e) (3) at least every five years and at thirty-six to thirty-three months prior to the end of their life expectancy and annually thereafter until December 22, 1998, or until ten years after the tank is installed, whichever is later;

(B) UST systems that do not meet the performance standards in subsection 22a-449 (d)-102 (a) of these

regulations may use monthly inventory controls, conducted in accordance with subdivisions 22a-449 (d)-104 (e) (1) or (2) of these regulations, and annual tank tightness testing, conducted in accordance with subdivision 22a-449 (d)-104 (e) (3) of these regulations, until the closure date specified in subsections 22a-449 (d)-110 (a) and (b) of these regulations for that UST system or
December 22, 1998, whichever date is earlier.

(C) Tanks with capacity of 550 gallons or less may use weekly tank gauging, conducted in accordance with subdivision 22a-449 (d)-104 (e) (2) of these regulations.

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

(A) Pressurized piping. Underground piping that conveys regulated substances under pressure shall:

(i) Be equipped with an automatic line leak detector conducted in accordance with subdivision 22a-449 (d)-104 (f) (1) of these regulations; and

(ii) Have an annual line tightness test conducted in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations or have monthly monitoring conducted in accordance with subdivision 22a-449 (d)-104 (f) (3) of these regulations.

(B) Suction piping. Underground piping that conveys regulated substances under suction shall either have a line tightness test conducted at least every three years until thirty-six to thirty-three months prior to the end of their life expectancy, on which date and annually thereafter line tightness tests shall be conducted, and all such line tightness tests shall be conducted and in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations, or use a monthly monitoring method conduct in accordance with subdivision 22a-449 (d)-104 (f) (3) of these regulations. For suction piping that is designed and constructed to meet the following standards, a line tightness test shall be conducted thirty-six to thirty-three months prior to the end of their life expectancy and annually thereafter and such line tightness shall be conducted in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations:

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

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

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

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

(v) A method is provided that allows compliance with subparagraphs 22a-449 (d)-104 (c) (2) (B) (ii), (iii) and (iv) of these regulations of this section to be readily determined.

(d) **Requirements for hazardous substance UST systems.**

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

(1) Release detection at existing UST systems shall meet the requirements for petroleum UST systems in subsection 22a-449 (d)-104 (c) of these regulations. By December 22, 1998, all existing hazardous substance UST systems shall meet the release detection requirements for new systems in subdivision 22a-449 (d)-104 (d) (2) of these regulations.

(2) Release detection at new hazardous substance UST systems shall meet the following requirements:

(A) Secondary containment systems shall be designed, constructed and installed to:

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

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

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

(B) Double-walled tanks shall be designed, constructed, and installed to:

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

(ii) Detect the failure of the inner wall.

(C) External liners (including vaults) shall be designed, constructed, and installed to:

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

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

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

(D) Underground piping shall be equipped with secondary containment that satisfies the requirements of subdivision 22a-449 (d)-104 (d) (2) (A) of these regulations, including, but not limited to, trench liners and jacketing of double-walled pipe. In addition, underground piping that conveys regulated substances under pressure shall be equipped with an automatic line leak detector in accordance with subdivision 22a-449 (d)-104 (f) (1) of these regulations.

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

(i) Demonstrate to the implementing agency that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in subdivisions 22a-449 (d)-104 (e) (2) to (8), inclusive, of these regulations can detect a release of petroleum;

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

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

(F) The provisions of 40 CFR 265.193, Containment and Detection of Releases, may be used to comply with these requirements of subdivision 22a-449 (d)-104 (d) (2) of these regulations.

(e) **Methods of release detection for tanks.**

Each method of release detection for tanks used to meet the requirements of subsection 22a-449 (d)-104 (c) of these regulations shall be conducted in accordance with the following:

(1) Inventory control. The owner or operator of an UST system shall assure that the following information is recorded: on a daily basis, the amount of regulated substances sold, used and received, and the level of water and product in the tank or container; and on a weekly basis, a reconciliation comparing these figures to determine whether an abnormal loss or gain has occurred. Separate records shall be maintained for each system of interconnected tanks or containers and serving pumps or dispensers. The owner or operator shall review such records and attest to their accuracy by signing them no later than seven days following their recording. Inventory control shall also be conducted in the following manner:

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

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

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

(D) Product dispensing is metered and recorded within the local standards for meter calibration or an accuracy of 6 cubic inches for every 5 gallons of product withdrawn, except that if the local standards for meter calibration is more stringent than an accuracy of 6 cubic inches for every 5 gallons of product withdrawn, the product dispensing shall be calibrated to the local standards; and

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

(F) The commissioner may require an owner or operator to perform a tank and line tightness test in accordance with subdivisions 22a-449 (d)-104 (e) (3) and (f) (2) of these regulations of any UST system for which daily inventory records are not maintained in accordance with the requirements in these regulations;

(G) When inventory reconciliation indicates an abnormal loss or gain which is not explainable by spillage, temperature variations or other known causes, the owner or operator shall assure the immediate investigation and correction of the source of the abnormal loss or gain. At a minimum, the owner or operator shall take as many of the steps listed below in subparagraph (i), (ii), and (iii) as necessary to confirm an abnormal loss or gain. In addition, if an abnormal loss or gain is measured during a weekly reconciliation and there were four (4) consecutive days of loss or four (4) consecutive days of gain during the ten (10) day period prior to reconciliation, or abnormal losses or abnormal gains are measured during two consecutive weekly reconciliations, the owner or operator shall take as many of the steps listed below in subparagraph (iv), (v), and (vi) as necessary to confirm an abnormal loss or gain.

(i) When an inventory record error is not apparent, a recalculation to determine abnormal loss or gain shall be made starting from a point where records indicate no abnormal loss or gain;

(ii) A detailed visual inspection of these components of the facility which are readily accessible for evidence of failure shall be performed;

(iii) The dispensers of the particular regulated substances in question shall be checked for proper calibration;

(iv) A line tightness test shall be performed on the piping system between the storage tank or container and dispenser(s) in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations;

(v) A tank tightness test shall be performed on all other piping attached to the tank in accordance with subdivision 22a-449 (d)-104 (e) (3) of these regulations; and

(iv) A line tightness test shall be performed on all other piping attached to the tank in accordance with subdivision 22a-449 (d)-104 (f) (2) of these regulations.

(H) When an abnormal loss or gain is confirmed, the owner or operator shall immediately report the abnormal loss or gain to the commissioner in accordance with Section 22a-450 of the General Statutes as amended.

(I) Practices described in the American Petroleum Institute Publication 1621, “Recommended Practice for Bulk Liquid Stock Control at Retail Outlets,” may be used, where applicable, as guidance in meeting the requirements of subdivision 22a-449 (d)-104 (e) (1) of these regulations.

(2) Manual tank gauging. Manual tank gauging shall meet the following requirements:

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

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

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

(D) A leak is suspected and subject to the requirements of section 22a-449 (d)-105 of these regulations if the variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table:

Nominal tank capacity	*Weekly standard (one test)*	*Monthly standard (average of four tests*
550 gallons or less	10 gallons	5 gallons.
551-1,000 gallons	13 gallons	7 gallons.
1,001-2,000 gallons	26 gallons	13 gallons.

(E) Only tanks of 550 gallons or less nominal capacity may use this as the sole method of release detection. Tanks of 551 to 2,000 gallons may use the method in place of manual inventory control in subdivision 22a-449 (d)-104 (e) (1) of these regulations except that this method shall not be used for compliance with the requirements in subdivision 22a-449 (d)-104 (e) (4) (B) of these regulations. Tanks of greater than 2,000 gallons nominal capacity shall not use this method to meet the requirements of section 22a-449 (d)-104 of these regulations;

(F) Daily measurements are taken for any water level in the bottom of the tank to the nearest one eighth of an inch except such measurement for water shall not be required for double wall tanks with interstitial monitoring performed in accordance with subsection 22a-449 (d)-104 (e) of these regulations.

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

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

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

(B) Inventory control or another test of equivalent performance is conducted in accordance with the requirements of subdivision 22a-449 (d)-104 (e) (1) of these regulations.

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

(A) The materials used as backfill are sufficiently porous, including, but not limited to, gravel, sand and crushed rock to readily allow diffusion of vapors from releases into the excavation area;

(B) The stored regulated substance, or a tracer compound placed in the tank system, is sufficiently volatile, including, but not limited to, gasoline, to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a release from the tank;

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

(D) The level of background contamination in the excavation zone shall not interfere with the method used to detect releases from the tank;

(E) The vapor monitors are designed and operated to detect any significant increase in concentration above background of the regulated substance stored in the tank system, a component or components of that substance, or a tracer compound placed in the tank system;

(F) In the UST excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs 22a-449 (d)-104 (e) (5) (A), (B), (C), and (D) of these regulations and to establish the number and positioning of monitoring wells that shall detect releases within the excavation zone from any portion of the tank that routinely contains product; and

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

(6) Groundwater monitoring. Testing or monitoring for liquids on the ground water shall meet the following requirements:

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

(B) Groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec. The soil shall be a permeable material, including, but not limited to, gravels, coarse to medium sands, coarse silts or other permeable materials;

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

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

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

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

(G) Within and immediately below the UST system excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs 22a-449 (d)-104 (e) (6) (A), (B), (C), (D), and (E) of these regulations and to establish the number and positioning of monitoring wells or devices that shall detect releases from any portion of the tank that routinely contains product; and

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

(I) Groundwater samples shall be obtained monthly from each monitoring well and checked by visual and vapor testing methods to determine the presence of a release.

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

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

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

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

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

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

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

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

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

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

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

(8) Other methods. Any other type of release detection method, or combination of methods, can be used if the implementing agency gives prior, written approval including any conditions as deemed necessary and if:

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

(B) The implementing agency may approve another method if the owner and operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in subdivisions 22a-449 (d)-104 (e) (3), (4), (5), (6), (7) and (8) of these regulations. In comparing methods, the implementing agency shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected. If the method is approved, the owner and operator shall comply with any conditions imposed by the implementing agency on its use to ensure the protection of human health and the environment.

(f) **Methods of release detection for piping.**

Each method of release detection for piping used to meet the requirements of subsection 22a-449 (d)-104 (c) of these regulations shall be conducted in accordance with the following:

(1) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of regulated substances through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour. An annual test of the operation of the leak detector shall be conducted in accordance with the manufacturer's requirements.

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

(3) Applicable tank methods. Any of the methods in subdivisions 22a-449 (d)-104 (e) (5), (6), (7) and (8) of these regulations may be used if they are designed to detect a release from any portion of the underground piping that routinely contains regulated substances.

(g) **Release detection recordkeeping.**

All UST system owners and operators shall maintain records in accordance with subsection 22a- 449 (d)-103 (e) of these regulations demonstrating compliance with all applicable requirements of section 22a-449 (d)-104 of these regulations. These records shall include the following:

(1) All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, shall be maintained for 5 years beyond the operational life of the UST system;

(2) The results of any sampling, testing, or monitoring shall be maintained for at least 5 years beyond the operational life of the UST system; and

(3) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site shall be maintained for at least 5 years beyond the operational life of the UST system. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be retained for 5 years beyond the operational life of the UST system.]

(a) **Requirements for release detection equipment.**

The owner or operator of an UST system shall ensure that equipment used for release detection complies with and is operated in accordance with the following requirements:

(1) The release detection equipment shall be:

(A) Able to detect a release from any portion of the UST system that routinely contains product;

(B) Installed and calibrated in accordance with the instructions from the manufacturer of the release detection equipment;

(C) Operated and maintained in accordance with the following, provided the requirements are no less stringent than the provisions of this section:

(i) The instructions from the manufacturer of the release detection equipment; or

(ii) A code of practice developed by a nationally recognized association or independent testing laboratory;

(D) Capable of detecting the leak rate or quantity with a probability of detection of 0.95 and a probability of false alarm of 0.05;

(2) The owner or operator shall test the electronic and mechanical components of such release detection equipment for proper operation at least once annually. The annual test shall:

(A) Be performed in accordance with:

(i) The instructions from the manufacturer of the release detection equipment; or

(ii) A code of practice developed by a nationally recognized association or independent testing laboratory; and

(B) Include the following UST system components and test criteria if utilized as part of the UST system:

(i) Automatic tank gauging and other controllers. The owner or operator shall test alarm(s); verify system configuration; and test battery backup;

(ii) Probes and sensors. The owner or operator shall inspect for residual buildup; ensure floats move freely; ensure shaft is not damaged; ensure cables are free of kinks and breaks; and test alarm operability and its communication with controller;

(iii) Automatic line leak detector. The owner or operator shall test operation to meet criteria in subsection (b)(4) of this section by simulating a leak; and

(iv) Vacuum pumps and pressure gauges. The owner or operator shall ensure proper communication with sensors and controller.

(C) If an annual test reveals that any release detection equipment is not functioning properly, the owner or operator shall:

(i) Comply with the requirements of section 22a-449(d)-105 of the UST regulations; and

(ii) (I) Immediately repair or replace all malfunctioning equipment; or

(II) Remove all regulated substances from such UST system so that no more than 2.5 centimeters (one inch) of such substances, or residue from such substances, remain in the UST system and, not later than 90 days after the test revealing malfunctioning release detection equipment is performed, repair or replace all malfunctioning equipment or begin permanent closure of such UST system; and

(3) For a petroleum UST, daily measurements for any water level in the bottom of the tank to the nearest one-eighth of an inch shall be taken and recorded. Measurements that detect a loss or gain of water exceeding 0.5 percent of the volumetric capacity of the tank shall constitute a failure. This subdivision shall not apply to a double walled UST conducting interstitial monitoring in accordance with subsections (b)(1)(B) and (b)(1)(C) of this section.

(b) **Release detection requirements for petroleum UST systems.**

The owner or operator of a petroleum UST system shall provide release detection for tanks and piping as follows:

(1) Methods of Release Detection for Double-Walled Petroleum USTs. The owner or operator of a petroleum UST system with a double-walled UST shall use interstitial monitoring that complies with the requirements of this subdivision:

(A) For a double-walled UST installed before October 1, 2003, the owner or operator shall perform release detection using any method that complies with the requirements of this subsection, provided that on or after {insert date 2 years after the effective date of this regulation}, such owner or operator shall use monitoring that complies with subparagraphs (B) or (C) of this subdivision.

(B) For a double-walled UST installed on or after October 1, 2003, but before {insert the effective date of this regulation}, the release detection shall continuously monitor the interstitial space between the walls of the UST or comply with subparagraph (C) of this subdivision.

(C) For a double-walled UST installed on or after {insert 90 days after the effective date of this regulation}, the release detection shall continuously monitor the integrity of the walls of the tank for a potential failure of the primary and the secondary containment such that both the inner and outer walls of such tank, are monitored using technology such as inert gas, liquid, or a vacuum.

(2) Methods of Release Detection for Single-Walled Petroleum USTs. Except as provided for in subdivision (3) of this subsection, the owner or operator of a petroleum UST system with a single-walled UST shall use automatic tank gauging with inventory control that complies with the following requirements.

(A) For automatic tank gauging with inventory control:

(i) Perform an automatic product level monitor test that can detect a 0.2 gallon per hour leak rate from any portion of each tank that routinely contains product. This test shall be conducted and passed at least once every 30 days; and

(ii) Have an inventory control method that:

(I) Accurately records, on a daily basis, the amount of regulated substances removed from and added to the tank or interconnected tanks, the level of water and petroleum in the UST, and ensures that the measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch;

(II) Reconciles the daily readings on a weekly basis per tank or interconnected tanks to determine whether an abnormal loss or gain has occurred in accordance with subparagraph (B) of this subdivision. Such reconciliation shall be recorded on a form prescribed by the commissioner or a form that contains the information on the form prescribed by the commissioner;

(III) Uses equipment capable of measuring the level of water and petroleum in the tank to the nearest one-eighth of an inch;

(IV) Ensures that deliveries of petroleum are made through a drop tube that extends to within one foot of the tank bottom and by {insert one year after effective date of the UST regulations}, such drop tube shall extend no more than six inches from the tank bottom; and

(V) Measures and verifies all amounts of petroleum delivered into the tank by comparing delivery receipts with measurements of the tank inventory volume immediately before and immediately after delivery.

(B) When a weekly reconciliation indicates an abnormal loss or gain, the owner or operator shall immediately investigate and correct the source of the abnormal loss or gain and take as many of the steps listed in this subparagraph as are necessary to determine the source of the abnormal loss or gain. If, after taking such steps, the source of such abnormal loss or gain has not been identified, then the owner or operator shall comply with the requirements of subparagraph (C) of this subdivision.

(i) When an inventory record error is not apparent, perform a recalculation to determine whether an abnormal loss or gain has occurred using existing inventory records starting from the point where such records do not indicate an abnormal loss or gain;

(ii) Conduct a detailed visual inspection of the components of the UST system which are readily accessible for evidence of failure; and

(iii) Check the dispensers associated with the UST for proper calibration.

(C) The owner or operator shall perform a tank tightness test and a line tightness test, and any other test designated by the commissioner in writing to identify a release from the UST system if:

(i) A weekly reconciliation indicates an abnormal loss or gain and there were 4 consecutive days of loss or 4 consecutive days of gain during the 10-day period prior to reconciliation;

(ii) An abnormal loss or abnormal gain is measured during 2 consecutive weekly reconciliations; or

(iii) The owner or operator cannot identify the source of the abnormal loss or gain using the methods identified in subparagraph (B) of this subdivision.

(3) Manual Tank Gauging for USTs Storing Used Oil.

(A) Manual tank gauging may only be used as the method of release detection for an UST that contains 550 gallons or less of used oil.

(B) The owner or operator using manual tank gauging shall ensure that:

(i) The water level in the bottom of the tank shall be measured daily. Such measurements shall be in increments of no more than one-eighth of an inch; and

(ii) UST liquid level measurements, of all liquids in the tank, shall be taken and recorded, including date and time of measurements, at the beginning and ending of a period of at least 36 hours during which no used oil is added to or removed from the tank. The liquid level measurements shall be based on an average of 2 consecutive stick readings taken at both the beginning and ending of the period. Such measurements shall be in increments of no more than one-eighth of an inch. If such measurements detect a variation of 10 gallons a week or 5 gallons a month based on the average of 4 weekly tests, such variation shall constitute a failure and the owner or operator shall comply with section 22a-449(d)-105 of the UST regulations.

(4) Pressurized Piping.

(A) Underground piping that conveys or contains petroleum under pressure shall utilize an automatic line leak detector capable of detecting the presence of a release of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour and restricting or shutting off the flow of regulated substances through piping.

(B) The owner or operator shall conduct an annual test of the automatic line leak detector in accordance with the manufacturer's requirements, provided that there are at least 9 months between such tests. If an annual test reveals that equipment is not functioning, the owner or operator shall:

(i) Immediately repair or replace all malfunctioning equipment; and

(ii) If the equipment malfunction could have prevented the UST system from detecting a release and if the piping associated with such UST system does not use interstitial monitoring, the owner or operator shall perform a line tightness test. If such UST system fails a line tightness test, the owner or operator shall comply with the requirements of section 22a-449(d)-105 of the UST regulations.

(C) Except for piping utilizing continuous interstitial monitoring, pressurized piping shall be tested annually using a line tightness test capable of detecting a 0.1 gallon per hour leak rate at one and one-half times the operating pressure of such piping, provided there is at least 9 months between such tests. A measurement that detects a leak rate equal to or greater than 0.1 gallons per hour at one and one-half times the operating pressure of piping being tested shall constitute a failure; and

(D) Pressurized piping installed on or after October 1, 2003 shall utilize interstitial monitoring that, at a minimum, has sensors at both ends of the piping run or a vacuum that provides continuous interstitial monitoring.

(5) Suction piping.

(A) The owner or operator shall ensure that underground piping that conveys or contains petroleum under suction shall be tested once every 3 years using a line tightness test capable of detecting a 0.1 gallon per hour leak rate at one and one-half times the operating pressure of such piping. A measurement that detects a leak rate equal to or greater than 0.1 gallons per hour at one and one-half times the operating pressure of piping being tested shall constitute a failure.

(B) A line tightness test shall not be required for suction piping that:

(i) Utilizes interstitial monitoring that has a sensor capable of detecting a release or has a vacuum that provides continuous interstitial monitoring; or

(ii) Is designed and constructed to meet the following standards and the owner or operator maintains

documentation demonstrating that:

(I) The piping is sloped so that the contents of the pipe drain back into the tank if the suction is released;

(II) Only one check valve is included in each suction line; and

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

(C) Underground piping that conveys or contains petroleum under suction, installed on or after October 1, 2003, shall be double-walled and shall utilize interstitial monitoring that has a sensor capable of detecting a release or has a vacuum that provides continuous interstitial monitoring.

(c) **Release detection requirements for hazardous substance UST systems.**

The owner or operator of a hazardous substance UST systems shall provide release detection for tanks and piping as follows:

(1) The interstitial space of the tank and piping used for secondary containment, depending upon date of installation, shall be:

(A) Checked for equipment malfunctions, such as whether liquid is present, at least once every 30 days if the UST system was installed before October 1, 2003 and does not have continuous interstitial monitoring;

(B) Continuously monitored using inert gas, liquid, a vacuum, electronic monitoring, or mechanical monitoring for a release from the primary containment, such as the inner wall, if the UST system was installed:

(i) On or after October 1, 2003, but before {insert date 90 days after the effective date of this regulation}; or

(ii) Before October 1, 2003, if such system has continuous interstitial monitoring; or

(C) Continuously monitored such that both the inner and outer walls of such tank are monitored using technology such as inert gas, liquid, or a vacuum if the UST system was installed on or after {insert date 90 days after the effective date of this regulation}.

(2) For a hazardous substance UST system that utilizes underground piping that conveys or contains hazardous substances under pressure, the owner or operator shall conduct an annual test of the operation of the automatic line leak detector in accordance with subsection (b)(4) of this section.

(d) **Additional UST system testing.**

(1) If the owner or operator fails to undertake release detection for an UST system in compliance with this section, the owner or operator shall perform a tank tightness test capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(2) If the owner or operator fails to undertake release detection for piping in compliance with this section, and during such non-compliance the owner or operator would have been prevented from detecting a release, in addition to any other requirements of this section, the owner or operator shall perform a line tightness test capable at one and one-half times the operating pressure of such piping.

(3) Any testing required by subdivisions (1) and (2) of this subsection is in addition to any other testing required by the UST regulations and does not otherwise constitute compliance with any other testing requirement.

(e) **Failures.**

If any monitoring, test, or check required by this section detects a malfunction, release, or a suspected release, unless otherwise specified in this section, the owner or operator of the UST system shall comply with section 22a-449(d)-105 of the UST regulations.

Sec. 22a-449(d)-105. [Release reporting, investigation,] Suspected releases and [confirmation] investigation of suspected releases

(a) [**Reporting of suspected] Suspected releases.**

[Owners and operators of UST systems shall report to the implementing agency within 24 hours, or any time period provided under applicable law, including, but not limited to, section 22a-450 of the general statutes, as amended and any implementing regulations, whichever is earliest, and follow the procedures in subsection 22a-449 (d)-105 (c) of these regulations for any of the following conditions:

(1) The discovery by owners and operators or others of released regulated substances at the UST site or in the surrounding area including, but not limited to, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water.

(2) Unusual operating conditions observed by owners and operators, including, but not limited to, the erratic behavior of product dispensing equipment, the sudden loss of product from the UST system, or an unexplained presence of water in the tank, unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced; and,

(3) Monitoring results from a release detection method required under subsections 22a-449 (d)- 104 (c) and (d) of these regulations that indicate a release may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result;

(4) The owner or operator of UST systems shall submit a written report to the commissioner within 3 working days of a release including, but not limited to, estimated amount of product lost, location of release and identification of leaking components of the UST system.]

(1) The conditions identified in this subdivision shall constitute a suspected release.

(A) The discovery by an owner or operator or any other person of a release of regulated substances at an underground storage facility or in the surrounding area including the presence of NAPL or vapors in soils, basements, sewer and utility lines, and nearby surface water;

(B) Unusual operating conditions, including:

(i) Erratic behavior of product dispensing equipment;

(ii) The sudden loss of product from an UST system;

(iii) An unexplained presence of water in the tank;

(iv) Any condition or monitoring result, such as an alarm, indicative of the failure of an UST system;

(v) Any condition in the secondary containment system, such as liquid in sumps or interstitial space, indicative of a potential release; or

(vi) A visual inspection that indicates a release may be occurring.

(C) A failed test of any UST system component such as:

(i) a failed tank tightness test;

(ii) a failed line leak detector;

(iii) a failed cathodic protection test;

(iv) a failed test of a piping containment sump;

(v) a failed test of an under-dispenser containment sump;

(vi) a failed test of a spill bucket; or

(vii) a failed test of interstitial space on any component.

(D) Monitoring results from a release detection method pursuant to section 22a-449(d)-104 of the UST regulations that indicate that a release may have occurred, regardless of whether or not the method is being

used as the primary method of release detection. Except that no further action shall be required under this section if:

(i) Such monitoring device is found to be defective and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result; or

(ii) An alarm was investigated and the owner or operator determined that the alarm was not the result of a failure of the UST system.

(2) Any UST system equipment or component that is found to be defective, but not leaking, and that is immediately repaired or replaced shall not be considered an unusual operating condition for purposes of subdivision (1)(B) of this subsection provided the owner or operator can demonstrate, through documentation, the basis upon which it was determined that the UST system equipment or component was not leaking.

(b) **Investigation due to off-site impacts.**

[When required by the implementing agency, owners] The Owner [and operators]or operator of an UST [systems] system shall follow the procedures in [subsections 22a-449 (d)-105 (c) of these regulations] subsection (c) of this section to determine if [the] such UST system [is] may be the source of off-site impacts when such impacts are discovered by the owner or operator or are reported to the owner or operator by any other person. These impacts include, but are not limited to, the presence of [free product] NAPL or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking [waters that has been observed by the implementing agency or brought to its attention by another party] water.

(c) **[Release investigation] Reporting and investigating suspected releases and confirmation steps.** Unless corrective action is initiated in accordance with section 22a-449[ ](d)-106 of [these regulations] the UST regulations, [owners and operators]the owner or operator shall immediately investigate [and confirm all] any suspected [releases of regulated substances requiring reporting under subsections 22a-449 (d)-105 (a) of these regulations within 7 days, or another time period specified] release listed in [writing by the implementing agency, using either the following steps or another procedure given prior written approval by the implementing agency] this section. Such investigation shall include:

(1) [System test. Owners and operators shall conduct tests according to the requirements for tightness testing in subdivisions 22a-449 (d)-104 (e) (3) and (f) (2) of these regulations that determine whether a leak exists in any portion of the tank, or the attached piping other than vent and vapor recovery piping that does not routinely contain product unless the commissioner requests that such piping be tested, or any combination of such tank and piping.] Report. A suspected release shall be reported to the commissioner, not later than 24 hours after the discovery. Such report shall be on a form and in a manner prescribed by the commissioner on the department's internet website.

[(A) Owners and operators shall repair, replace or upgrade the UST system, and begin corrective action in accordance with section 22a-449 (d)-106 of these regulations if the test results for the system, tank, or delivery piping indicate that a leak exists.

(B) Further investigation shall not be required if the test results for the system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release.

(C) Owners and operators shall conduct a site check as described in subdivision 22a-449 (d)-105 (c) (2) of these regulations if the test results for the system, tank, and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.]

(2) (A) Tightness test. The owner or operator shall complete a tightness test of the UST system not later than 72 hours after the discovery of any suspected release; however, a tightness test need not be conducted if no further action is required under subsection (a)(1)(D) of this section. Unless requested by the commissioner, such test does not need to include spill buckets, or vent and vapor recovery piping that does

not routinely contain product. Any such tightness testing shall comply with the following:

(i) For a tank, be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table;

(ii) For piping, be capable of detecting a 0.1 gallon per hour leak rate at one and one-half times the operating pressure of such piping; and

(iii) For a containment sump, be performed in accordance with section 22a-449(d)-103(e)(2) of the UST regulations.

(B) Under-dispenser containment sump, piping containment sump and spill buckets.

If the suspected release is due to an alarm, sensor or similar device in a containment sump or spill bucket indicating that liquid may be present in such sump or spill bucket, or if there is liquid observed in any such sump or spill bucket, the owner or operator of such sump or spill bucket shall:

(i) Immediately investigate and if applicable, determine if liquid is present. If liquid is present, identify the cause for the presence of such liquid;

(ii) Immediately remove all liquid and ensure that any liquid removed is managed and disposed of in accordance with all applicable federal, state, and local requirements;

(iii) Immediately take corrective measures to prevent liquid from accumulating in such sump or spill bucket, including preventing water from outside the UST system from accumulating in a sump or spill bucket; and

(iv) Unless such containment sump or spill bucket has passed a tightness test within the previous 30 days, not later than 48 hours after liquid in the sump or spill bucket have been removed, perform such test in accordance with section 22a-449(d)-103(e)(2) of the UST regulations. If the test results indicate that the containment sump or spill bucket is not liquid tight, as soon as practicable, but not later than 5 days after obtaining such test results, the owner or operator shall conduct a site check pursuant to subdivision (4) of this subsection.

(C) Visual inspection. If a visual inspection of any part of an UST system that is not included in a test performed pursuant to subparagraph (B)(iv) of this subdivision indicates a release is or may be occurring, the owner or operator shall immediately repair the component causing such condition to eliminate such suspected release or release.

(D) As soon as practicable, but not later than 5 days after a suspected release is discovered, the owner or operator shall conduct a site check pursuant to subdivision (4) of this subsection, if:

(i) Environmental contamination is the basis for suspecting a release; or

(ii) After taking the steps identified pursuant to subparagraphs (A) to (C), inclusive of this subdivision, the owner or operator cannot determine whether a release has occurred.

(E) If the commissioner determines that a suspected release has, or may have, occurred, in addition to the testing required by this section, the commissioner may require additional testing the commissioner deems necessary.

(F) For the purposes of this subdivision, any test deemed inconclusive shall constitute a failed test.

(3) Failures. If after taking the steps identified in subdivisions (2)(A) to (2)(C), inclusive, of this subsection, a failure is indicated, the owner or operator shall determine the source of such failure. If the source of such failure indicates that:

(A) A regulated substance is, or may be, emanating from an UST system, the owner or operator shall begin corrective action in accordance with section 22a-449(d)-106 of the UST regulations and;

(i) Repair the UST system pursuant to section 22a-449(d)-103(m) of the UST regulations, and if applicable temporarily close such tank in accordance with section 22a-449(d)-110 of the UST regulations; or

(ii) Permanently close such UST system in accordance with section 22a-449(d)-107 of the UST regulations;

(B) A regulated substance is not emanating from the UST system, the owner or operator shall repair or replace any part of the UST system determined to be in need of repair or replacement pursuant to section 22a-449(d)-103(m) of the UST regulations.

[(2)] (4) Site check. [Owners and operators] The owner or operator shall measure for the presence of a release where contamination is most likely to be present. [at the UST site and such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations.] In selecting sample types, sample locations, and measurement methods, owners and operators shall consider the nature of the stored substance, the type of initial alarm or cause for suspicion, the type of backfill, the depth of ground water, and other factors appropriate for identifying the presence and source of the release. [Sample] Unless otherwise approved by the commissioner in writing, sample collection and analysis shall comply with [the] appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the Connecticut Department of Public Health [Services] to perform such analyses.

[(A) If the test results for the excavation zone or the UST site indicate that a release has occurred, owners and operators shall begin corrective action in accordance with section 22a-449 (d)-106 of these regulations;

(B) If the test results for the excavation zone or the UST site do not indicate that a release has occurred, further investigation shall not be required.

(d) Reporting and cleanup of spills and overfills.

(1) Owners and operators of UST systems shall immediately contain and immediately clean up a spill or overfill and report to the implementing agency within 24 hours, or any time period provided under applicable law including, but not limited to, section 22a-450 of the general statutes, as amended, and any implementing regulations, whichever is earliest, and begin corrective action in accordance with section 22a-449 (d)-106 of these regulations in the following cases:

(A) Spill or overfill of petroleum that results in a release to the environment, and

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

(2) Owners and operators of UST systems shall immediately contain and immediately clean up a spill or overfill of a hazardous substance that is less than the reportable quantity. If cleanup cannot be accomplished within 24 hours, or another time period established in writing by the implementing agency, owners and operators shall immediately notify the implementing agency.

(3) Pursuant to 40 CFR sections 302.6 and 355.40, a release of a hazardous substance equal to or in excess of its reportable quantity shall also be reported immediately (rather than within 24 hours) to the National Response Center under sections 102 and 103 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and to appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986.]

Sec. 22a-449(d)-106. Release response and corrective action for UST systems containing petroleum or hazardous substances

[(a) **General.**

Owners and operators of petroleum or hazardous substance UST systems shall, in response to a confirmed release from the UST system, comply with the requirements of this section except for USTs excluded under subdivision 22a-449 (d)-101 (a) (2) of these regulations and UST systems subject to the Resource Conservation

and Recovery Act Subtitle C corrective action requirements under section 3004 (u) of the Resource Conservation and Recovery Act, as amended.

(b) **Additional Requirements.**

The following requirements shall apply in addition to those in this section:

(1) Releases prohibited. No owner or operator shall release any water, substance or material, including, but not limited to, regulated substances, from any UST system to the waters of the state without first obtaining a permit for such discharge pursuant to section 22a-430 of the general statutes, as amended.

(2) Corrective action. The owner or operator of an UST system which releases regulated substances without a permit issued pursuant to section 22a-430 of the general statutes, as amended, shall immediately cease such discharge and reclaim, recover and properly dispose of the discharged liquid and any other substance contaminated by it, restore the environment to a condition and quality acceptable to the commissioner, and repair damage caused by the discharge, and comply with the requirements in subdivision 22a-449 (d)-106 (d) (1) and (b) (3) of these regulations, all to the satisfaction of the commissioner.

(3) Failures.

(A) The owner or operator of an UST system at which a failure occurs shall immediately empty and discontinue the use of the failed component and:

(i) Remove or abandon it within ninety days in accordance with the applicable procedures in NFPA 30 and in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations; or

(ii) Repair it within sixty days in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations; or

(iii) Replace all damaged components in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations.

(B) When a failure occurs at an UST system, all of such UST system's components shall be evaluated within thirty days to determine whether similar conditions to that which caused the failure exist. Within ten (10) days following such evaluation, the owner or operator shall notify the commissioner in writing of the methods and results of each such evaluation. If an additional failure is detected, the owner or operator shall act in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations.

(c) **Initial response.**

Upon confirmation of a release in accordance with subsection 22a-449 (d)-105 (c) of these regulations or after a release from the UST system is identified in any other manner, owners and operators shall perform the following initial response actions within 24 hours of a release or within another reasonable period of time determined by applicable law or the implementing agency:

(1) Report the release to the implementing agency by telephone, or electronic mail; and notify the appropriate emergency fire response and public safety and health personnel;

(2) Take immediate action to prevent any further release of the regulated substance into the environment including emptying and discontinuing use of any leaking UST system component and any UST system component which has been subject to a failure; and

(3) Identify and mitigate fire, explosion, and vapor hazards.

(d) **Initial abatement measures and site check.**

(1) Unless directed in writing to do otherwise by the implementing agency, owners and operators shall perform the following abatement measures:

(A) Remove all of the regulated substance from the UST system to prevent further release to the environment;

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

(C) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product

that have migrated from the UST excavation zone and entered into subsurface structures including, but not limited to, sewers or basements;

(D) Remedy hazards posed by contaminated soils and other materials that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, the owner and operator shall comply with applicable State and local requirements;

(E) Measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with the site check required by subdivision 22a-449 (d)-105 (c) (2) of these regulations or the closure site assessment of subdivision 22a-449 (d)-107 (c) (1) of these regulations. Such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations. Sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the department of public health and addiction services to perform such analyses. In selecting sample types, sample locations, and measurement methods, the owner and operator shall consider the nature of the stored substance, the type of backfill, depth to ground water and other factors as appropriate for identifying the presence and source of the release; and

(F) Investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with subsection 22a-449 (d)-106 (f) of these regulations.

(2) Within 20 days after release confirmation, or within another reasonable period of time specified in writing by the implementing agency, owners and operators shall submit a report to the implementing agency summarizing the initial abatement steps taken under subdivision 22a-449 (d)-106 (d) (1) of these regulations and any resulting information or data.

(e) **Initial site characterization.**

(1) Unless directed in writing to do otherwise by the implementing agency, owners and operators shall assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in subsections 22a-449 (d)-106 (a) and (c) of these regulations. This information shall include, but shall not necessarily be limited to the following:

(A) Data on the nature and estimated quantity of release;

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

(C) Results of the site check required under subdivision 22a-449 (d)-106 (d) (1) (E)of these regulations; and

(D) Results of the free product investigations required under subdivision 22a-449 (d)-106 (d) (1) (F) of these regulations, to be used by owners and operators to determine whether free product shall be recovered under subsection 22a-449 (d)-106 (f).

(2) Within 45 days of release confirmation or another reasonable period of time specified in writing by the implementing agency, owners and operators shall submit the information collected in compliance with subdivision 22a-449 (d)-106 (e) (1) of these regulations to the implementing agency in a manner that demonstrates its applicability and technical adequacy, or in a format and according to the schedule required by the implementing agency.

(f) **Free product removal.**

At sites where investigations under subdivision 22a-449 (d)-106 (d) (1) (F) of these regulations indicate the presence of free product, owners and operators shall remove free product to the maximum extent practicable as determined by the implementing agency while continuing, as necessary, any actions initiated under subsections 22a-449 (d)-106 (c), (d) and (e) of these regulations, or preparing for actions required under subsections 22a-449 (d)-106 (g) and (h) of these regulations. In meeting the requirements of this section, owners and operators

shall:

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

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

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

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

(A) The name of the person(s) responsible for implementing the free product removal measures;

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

(C) The type of free product recovery system used;

(D) Whether any discharge shall take place on-site or off-site during the recovery operation and where this discharge shall be located;

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

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

(G) The disposition of the recovered free product.

(g) **Investigations for soil and ground-water cleanup.**

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

(A) There is evidence that ground-water wells have been affected by the release, including, but not limited to, evidence found during release confirmation or during previous corrective action measures;

(B) Free product is found to need recovery in compliance with subsection 22a-449 (d)-106 (f) of these regulations;

(C) There is evidence that contaminated soils may be in contact with ground water, including, but not limited to, evidence found during conduct of the initial response measures or investigations required under subsections 22a-449 (d)-106 (a), (c), (d), (e) and (f) of these regulations; and

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

(2) Owners and operators shall submit the information collected under subdivision 22a-449 (d)-106 (g) (1) of these regulations as soon as practicable or in accordance with a schedule established by the implementing agency.

(h) **Corrective action plan.**

(1) At any point after reviewing the information submitted in compliance with subsections 22a-449 (d)-106 (c), (d), and (e) of these regulations implementing agency may require owners and operators to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and ground water. If a plan is required, owners and operators shall submit the plan according to a schedule and format established by the implementing agency. Alternatively, owners and operators may, after fulfilling the requirements of subsections 22a-449 (d)-106 (c), (d) and (e) of these regulations, choose to submit a corrective action plan for responding to contaminated soil and ground water. In either case, owners and operators are responsible for submitting a plan that provides for adequate protection of human health and the environment as

determined by the implementing agency, and shall modify their plan as necessary to meet this standard.

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

(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 ground water;

(D) The potential effects of residual contamination on nearby surface water and ground water;

(E) An exposure assessment; and

(F) Any information assembled in compliance with section 22a-449 (d)-106 of these regulations.

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

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

(A) Notify the implementing agency of their intention to begin cleanup;

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

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

(i) **Public participation.**

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

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

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

(4) The implementing agency shall give public notice that complies with subdivision 22a-449 (d)-106 (i) (1) of these regulations if implementation of an approved corrective action plan does not achieve the established cleanup levels in the plan and termination of that plan is under consideration by the implementing agency.]

(a) **General.**

For confirmed releases from an UST system or UST system component, including those in use, temporarily taken out of service, or permanently closed, owners and operators shall:

(1) For release response already underway as of {insert effective date of the UST regulations} and proceeding in compliance with the UST regulations effective July 28, 1994, either proceed in accordance with those regulatory requirements effective July 28, 1994, or proceed in accordance with the requirements

of this section.

(2) For releases discovered on or after {insert effective date of the UST regulations} or releases discovered prior to {insert effective date of the UST regulations} but not currently proceeding in compliance with the UST regulations effective July 28, 1994, comply with the requirements of this section.

(b) **Releases prohibited.**

No owner or operator shall release any water, substance or material, including regulated substances, from any UST system without first obtaining any necessary permit or authorization, which may include a permit for such release issued pursuant to section 22a-430 of the Connecticut General Statutes.

(c) **Corrective action and failures.**

(1) The owner or operator of an UST system or underground storage facility from which there is or has been a release, including a release of regulated substances without a permit issued pursuant to section 22a-430 of the Connecticut General Statutes, shall:

(A) Immediately cease such release;

(B) Reclaim or recover all released liquid;

(C) Properly dispose of the released liquid and any other substance contaminated by such release;

(D) Restore any impacts from the release to a condition and quality acceptable to the commissioner, which for contamination covered by the RSRs shall require compliance with the RSRs, to the satisfaction of the commissioner;

(E) Repair and restore damage caused by the release to the satisfaction of the commissioner; and

(F) Comply with the requirements of this section.

(2) Initial response and abatement measures.

Upon confirmation of a release that has resulted in regulated substances no longer being contained in an UST system, the owner or operator of such UST system or underground storage facility shall:

(A) Immediately report the release to the commissioner in accordance with section 22a-450 of the Connecticut General Statutes and sections 22a-450-1 to 22a-450-6, inclusive, of the Regulations of Connecticut State Agencies, as soon as possible, but in no event later than one hour after the discovery of the release The report shall be made using a telephone number specified by the commissioner or some other method for reporting releases from an UST posted by the commissioner on the department's internet website;

(B) Immediately discontinue the use of each failed UST system component and, if applicable, empty such UST system component in compliance with the UST regulations;

(C) Immediately identify and mitigate any imminent hazard;

(D) Take immediate action to prevent any further release, including the removal of the regulated substances from the UST system as is necessary to prevent any further release and discontinue the use of any UST system component, or the entirety of such UST system, as applicable, until repairs to the system as specified in subparagraph (E) of this subdivision are completed, and such system functions as designed;

(E) Repair or replace each failed UST system component within the timeframe specified in the UST regulations, or if no timeframe is specified in the UST regulations, within 60 days of discovery of such failure, whichever is shorter, provided that if each failed UST system component cannot be repaired or replaced, within 90 days of any such determination, the UST system shall be permanently closed in accordance with section 22a-449(d)-107 of the UST regulations;

(F) Beginning immediately and continuing until all imminent hazards are fully abated, the owner and operator of the UST system or underground storage facility shall engage a contractor who possesses a valid permit issued by the commissioner pursuant to section 22a-454 of the Connecticut General Statutes to perform the following measures:

(i) Determine if there are any observable or detectable releases in addition to the confirmed release;

(ii) Prevent migration of each substance released using methods that may include removal of any material impacted by a release;

(iii) Continue to monitor and mitigate each imminent hazard caused by a release that has migrated from the UST system or underground storage facility, including at a minimum, any imminent hazard caused by vapors or NAPL that may have entered into subsurface structures, sewers or basements until such imminent hazard is remedied pursuant to subparagraph (D) of this subdivision; and

(iv) Abate, to the satisfaction of the commissioner, each imminent hazard including, but not limited to, remedying conditions created by excavation or exposure of such soils or other materials; and

(G) Take any other action directed by the commissioner.

(d) **Use of forms prescribed by the commissioner.**

(1) Any submittal to the commissioner as required by this section shall be made in writing on one of the following forms prescribed the commissioner:

(A) Initial site characterization form, as required by subsection (f)(2) of this section;

(B) NAPL action form, as required by subsection (g)(3) of this section;

(C) Completion of investigation form, as required by subsection (h)(2)(B) of this section;

(D) Remedial action plan form, as required by subsection (i)(1)(B) of this section;

(E) Completion of remedial action form, as required by subsection (i)(3)(B) of this section;

(F) Monitoring and progress status form, as required by subsections (i)(4)(B), (k)(4)(B) and (l) of this section; and

(G) Non-compliance form, as required by subsection (h)(1) of this section.

(2) If an electronic system is available for any submission identified in this subsection, such submittal shall be made in accordance with the instructions prescribed by the commissioner for the use of such electronic system.

(e) **Use of environmental professionals.**

(1) The owner or operator of an UST system or underground storage facility from which there has been a confirmed release shall retain a PEP throughout the corrective action process and may also retain a LEP to complete forms and submittals required by subsections (f) to (i), inclusive, and subsections (k) and (l) of this section. The owner or operator shall ensure that the EP retained pursuant to this subdivision prepares and signs each document, form, or report required by subsections (f) to (i), inclusive, and subsections (k) and (l) of this section. Within 10 days of a request by the commissioner, or such longer time period that the commissioner specifies in writing, the owner or operator shall submit to the commissioner a description of the retained EP's education, experience and training which is relevant to the actions required by this section.

(2) At any time, the commissioner may notify the owner and operator that the EP retained by the owner or operator is not acceptable to the commissioner. Any such notification shall include the basis for the commissioner's determination. Upon receipt of any such notification, the owner or operator shall have 30 days, unless a different time is specified in the notice from the commissioner, to retain a new EP. Nothing in this subsection shall preclude the commissioner from finding a previously acceptable EP unacceptable.

(3) If the owner or operator changes the EP retained pursuant to subdivision (1) of this subsection, the owner or operator shall notify the commissioner of such change using a form prescribed by the commissioner, not more than 30 days after such change.

(f) **Initial site characterization.**

(1) Unless directed in writing to do otherwise by the commissioner, the owner or operator of an UST system or underground storage facility with a confirmed release shall ensure that, as soon as is practicable, but not later than the completion of the initial response and abatement measures required by subsection (c) of this section,

the EP retained by such owner or operator:

(A) Determines the nature, extent and degree of a release starting where contamination is most likely to be present. In selecting sample types, sample locations, and measurement methods, the following shall be considered: the nature of the stored substance, the type of backfill, depth to ground water, geologic and subsurface conditions, engineering infrastructure, and other factors as appropriate for determining the nature, extent and degree of contamination, including any factors specified in writing by the commissioner. All sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity. The analysis of all samples shall comply with the general requirements for analytical data in the RSRs and be performed by a laboratory certified by the Connecticut Department of Public Health to perform such analyses.

(B) Investigates to determine the possible presence of NAPL, and begin NAPL removal as soon as practicable and in accordance with subsection (g) of this section;

(C) Assembles information about the site and the nature of the release, including information gained while confirming the release or completing the initial response and abatement measures in subsections (b) and (c) of this section. This information shall, at a minimum, include the following:

(i) Data on the nature, estimated quantity and duration of each release;

(ii) Whether reporting is required by other statutes or regulations and if so, whether any required report has been submitted;

(iii) Data from available sources or site investigations concerning the following: surrounding populations, water quality, a receptor survey that includes, but is not limited to, public and private water supply wells, water supplies, sensitive environmental resources, hazards to human health or public safety, geologic and subsurface conditions, locations of subsurface sewers, climatological conditions, and land use;

(iv) Results of the initial site check and abatement measures required under subsection (c) of this section;

(v) Results of the NAPL investigations required under subsection (f)(1)(B) of this section; and

(vi) A schedule for performing the actions required under subsections (g) to (i), inclusive, of this section.

(2) Not more than 30 days after a release is confirmed, unless otherwise specified by the commissioner in writing, the owner or operator shall submit to the commissioner a completed initial site characterization form which shall include a summary of the measures taken under this subsection and the information collected in compliance with subdivision (1)(C) of this subsection signed by the EP retained by the owner or operator to comply with this subsection, including a schedule for performing the actions required under subsections (g) to (i), inclusive, of this section. Within 10 days of a request by the commissioner, or such longer time period that the commissioner specifies in writing, the owner or operator shall submit to the commissioner a description of the retained EP's education, experience and training which is relevant to the actions required by this section.

(3) After submission of the initial site characterization form, for every release, and regardless of whether any changes to the schedule for performing the actions required under subsections (g) to (i), inclusive, of this section are deemed necessary, the owner or operator shall proceed without commissioner review and approval until notified otherwise by the commissioner. The requirements of subsection (e) of this section regarding use of an EP shall apply regardless of whether the actions remaining under this section will require review and approval by the commissioner. The use of a LEP is required if NAPL or groundwater impacts remain after 24 hours with a minimum of 3 attempts at removal. In addition, regardless of whether commissioner approval had been previously required, at any time during the conduct of actions under subsections (g) to (i), inclusive, of this section, the commissioner may:

(A) Notify the owner or operator in writing that commissioner review and approval of such actions is

required; or

(B) Notify the owner or operator in writing that commissioner approval is no longer required and that an EP shall be retained as soon as practicable by the owner or operator.

(g) **NAPL removal.**

(1) At any underground storage facility or site where investigations under subsection (c)(2)(F)(iii) or (f)(1)(B) of this section indicate the presence of NAPL, the owner or operator shall, as soon as is practicable, remove NAPL to the maximum extent practicable while continuing, as necessary, with any action initiated under subsections (b), (c) or (f) of this section or while preparing for any action required under subsections (h) or (i) of this section. To comply with the requirements of this subsection, the owner or operator shall:

(A) Conduct NAPL removal in a manner that maximizes removal of all forms of NAPL, while also minimizing the spread of contamination by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the underground storage facility or site, and that properly treats, releases or disposes of recovery byproducts in compliance with applicable local, state and federal requirements; and

(B) Handle any flammable products so as to prevent a fire or explosion.

(2) An owner or operator who is required to prepare a report pursuant to subsection (f)(1)(C)(v) of this section, unless the commissioner specifies another time period in writing, shall, not sooner than 45 days but not later than 60 days after confirmation of a release, prepare a report that, at a minimum, provides the following information:

(A) The name of the person(s) responsible for implementing the NAPL removal measures;

(B) The estimated quantity, type, and thickness of NAPL: (i) observed or measured in wells, boreholes, and excavations; and (ii) derived from other information;

(C) The type of NAPL recovery system used;

(D) Whether there will be any release during the recovery operation and if so, where this release will be located, whether any permit necessary to address such release has been obtained, and the type of treatment applied to, and the effluent quality expected from, any such release;

(E) The disposition of the recovered NAPL; and

(F) A description of additional actions to be taken, including removal of NAPL, sampling, and monitoring.

(3) The owner or operator shall retain the report required by subdivision (2) of this subsection and complete and submit to the commissioner not later than 60 days after confirmation of a release a NAPL action form which shall include a certification that the report has been completed and submit a summary of conclusions and recommendations contained in the report and any other information requested by the commissioner.

(4) If pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that commissioner review and approval of reports is required, the owner or operator shall submit the report required by subdivision (2) of this subsection to the commissioner.

(h) **Investigation of release.**

(1) In order to determine the nature, extent, and degree of contamination from a release, the owner or operator shall conduct an investigation of all areas potentially affected by the release, the underground storage facility where the release occurred, and the surrounding area potentially affected by the release. Such investigation shall identify receptors that are or could be affected by the release, including, but not be limited to, public and private drinking water supply wells, wetlands, residential basements, manholes, or surface water bodies. Unless otherwise directed by the commissioner, the investigation required by this subparagraph shall be completed as soon as technically practicable, but in no event later than the schedule approved by the commissioner provided in the initial site characterization form. For any investigation not completed in accordance with the schedule approved by the commissioner, the owner or operator shall submit a non-

compliance form as soon as possible, but not later than 10 days from the applicable date in the schedule, which shall include a written explanation of why the schedule has not been met and a revised schedule for review and approval by the commissioner. The commissioner's receipt of any such explanation and schedule noting that additional work is necessary shall not excuse or waive any non-compliance with this section and shall not prevent the commissioner from taking any other action regarding such non-compliance.

(2) Not later than 30 days after completion of the investigation, the owner or operator shall:

(A) Ensure that a report is prepared regarding the investigation required by subdivision (1) of this subsection. All analytical results from the investigation shall comply with the general requirements for analytical data contained in the RSRs. At a minimum, the report shall include the depth and location of samples collected, the method of sample collection, the laboratory analytical data associated with such samples, a summary of analytical results and with respect to such results, a statement that a data quality assessment and data usability evaluation has been performed and a determination of whether the data can be used for its intended purpose, the estimated area of contamination, a conceptual site model based upon the analytical results, a comparison to applicable RSR criteria, a photographic or video graphic record of investigation activities and all receptors discovered, and recommendations for any further investigation and remediation;

(B) Retain the report required by subparagraph (A) of this subdivision and submit to the commissioner a completion of investigation form which shall include a certification that the investigation required by this subdivision has been completed and a report prepared, and shall provide a summary of the conclusions and recommendations contained in the report, including whether the investigation has confirmed compliance with the RSRs, and any other information requested by the commissioner; and

(C) If pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that commissioner review and approval of reports is required, submit the report required by subparagraph (A) of this subdivision to the commissioner.

(3) If at any time during the investigation, NAPL or groundwater impacts remain after 24 hours with a minimum of 3 attempts at removal, a LEP shall be retained.

(i) **Remedial action.**

(1) Unless the investigation required in subsection (h) of this section has confirmed compliance with the RSRs, not later than 30 days after submitting the completion of investigation form, the owner or operator shall:

(A) Prepare a remedial action plan. At a minimum, the remedial action plan shall include the following information:

(i) A detailed description of the investigation performed and any revisions to the conceptual site model based upon the investigation;

(ii) The nature and extent of contamination from the release, including:

(I) The estimated area of contamination and the potential for migration;

(II) Identification of receptors that are or could be affected by the release, such as public or private supply wells, wetlands, basements or crawl spaces, engineering infrastructure and subsurface utilities, or surface water bodies;

(III) A summary of the results of laboratory analysis of samples collected;

(IV) The geologic and hydrogeologic conditions underneath the UST facility and the surrounding area, including, but not limited to, preferential pathways such as underground utilities and other subsurface conditions; and

(V) The proximity, quality, and uses of nearby surface water and groundwater;

(iii) A detailed evaluation of the alternatives for remedial actions to abate contamination to achieve compliance with the RSRs, including any alternative specified by the commissioner in writing.

For each remedial action alternative evaluated, the remedial action plan shall include:

(I) The most expeditious schedule for performing each alternative; and

(II) A list of all required permits and approvals.

(iv) A preferred remedial alternative or combination of alternatives that achieves compliance with the RSRs, with supporting justification, including a schedule to perform the preferred remedial action and a monitoring program to determine the degree to which the remedial action taken is effective.

(B) Not more than 30 days after submitting the completion of investigation form, submit to the commissioner a remedial action plan form which shall include the following information:

(i) A certification that the remedial action plan required by subdivision (1) of this subsection has been completed;

(ii) A summary of the preferred remedial alternatives that achieves compliance with the RSRs with supporting justification;

(iii) A schedule to perform the preferred remedial alternatives;

(iv) A monitoring program to determine the degree to which the remedial actions taken are effective; and

(v) Any other information requested by the commissioner on the remedial action plan form; and

(C) Submit the remedial action plan required by subdivision (1) of this subsection to the commissioner if:

(i) Pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that review and approval of reports is required; or

(ii) The remedial action plan includes monitored natural attenuation.

(2) The owner or operator shall implement the preferred remedial alternatives identified in the remedial action plan prepared pursuant to subdivision (1) of this subsection in accordance with the schedule submitted to or approved by the commissioner.

(3) Not later than 90 days after the preferred remedial alternatives identified in the remedial action plan prepared pursuant to subdivision (1) of this subsection has achieved compliance with the following provisions of the RSRs: soil criteria, direct exposure criteria, pollutant mobility criteria, determining compliance with the soil criteria, and additional remediation of polluted soil, the owner or operator shall:

(A) Prepare a remedial action report. This report shall include the following information:

(i) A detailed description of the remediation undertaken and any revisions to the conceptual site model based upon the remediation;

(ii) The nature and extent of contamination from the release, including:

(I) Final limits of the release area and the extent and degree of the contamination;

(II) Identification of impacted receptors that are or were affected by the release, including public and private supply wells, wetlands, basements or crawl spaces, engineering infrastructure and subsurface utilities, and surface water bodies;

(III) A summary of analytical results documenting compliance with all applicable provisions of the RSRs;

(IV) A plan and schedule for conducting monitoring to confirm compliance with the RSRs and to determine the degree to which the remedial action taken is effective; and

(V) Any additional information specified by the commissioner.

(B) Retain the remedial action report required by subparagraph (A) of this subdivision and not later than the date that implementation of the preferred remedial alternative has achieved compliance with the following provisions of the RSRs: soil criteria, direct exposure criteria, pollutant mobility criteria, determining compliance with the soil criteria, additional remediation of polluted soil, and any

criteria for other impacted material, the owner or operator shall submit to the commissioner a completion of remedial action form which shall include a certification that the remedial action report required by subparagraph (A) of this subdivision has been completed and any other information requested by the commissioner; and

(C) Submit the remedial action report required by subparagraph (A) of this subdivision to the commissioner if:

(i) Pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that review and approval of reports is required; or

(ii) The remedial action plan includes monitored natural attenuation.

(4) Not later than 30 days after completing the monitoring specified in the remedial action report prepared pursuant to subparagraph (A)(3) of this subsection, the owner or operator shall:

(A) Prepare a monitoring report. This report shall include:

(i) The results of the monitoring conducted, including whether monitoring demonstrated compliance with the groundwater provisions of the RSRs;

(ii) A plan and schedule for conducting any further monitoring to confirm compliance with the groundwater provisions of the RSRs and to determine the degree to which the remedial action taken is effective; and

(iii) Any other information requested by the commissioner.

(B) Retain the remedial action report required by subparagraph (A) of this subdivision and submit to the commissioner a monitoring and progress status form which shall include a certification that the monitoring report required by subparagraph (A) of this subdivision has been completed, whether monitoring demonstrated compliance with the groundwater provisions of the RSRs, and provide any other information requested by the commissioner; and

(C) Submit the monitoring report required by subparagraph (A) of this subdivision to the commissioner if:

(i) Pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that review and approval of reports is required; or

(ii) The remedial action plan includes monitored natural attenuation.

(j) **Additional information.**

The commissioner may request, in writing, that an owner or operator submit information regarding a release at an underground storage facility, including information concerning any action taken pursuant to this section. The owner or operator shall provide the information requested by the commissioner within the timeframe specified by the commissioner in the notice to the owner or operator, or if no timeframe is specified, not more than 30 days after such request, unless the owner or operator requests additional time and such request is approved in writing by the commissioner.

(k) **Supplemental or additional remedial actions.**

(1) The commissioner may determine that supplemental actions in addition to those actions taken under this section may be needed in response to a release at an underground storage facility. If such a determination is made, the commissioner shall notify the owner or operator of the UST system or underground storage facility, in writing, and the owner or operator shall undertake the additional or supplemental actions identified by the commissioner in accordance with the requirements of this subsection.

(2) Unless the notice from the commissioner specifies otherwise, not more than 30 days after receipt of a written notice from the commissioner pursuant to subdivision (1) of this subsection, the owner or operator shall prepare a scope of study explaining in detail how the owner or operator will undertake such additional or supplemental actions. The owner and operator shall submit such scope of study to the commissioner if, pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that commissioner

review and approval of reports is required.

(3) The owner or operator shall implement the action specified by such scope of study required by subdivision (2) of this subsection, or if pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that commissioner review and approval of reports is required, the owner or operator shall implement the action approved by the commissioner. The owner or operator shall undertake such additional or supplemental action within the timeframe specified by the commissioner in the notice sent pursuant to subdivision (1) of this subsection, or if no timeframe is specified not more than 30 days after receipt of such notice, unless the owner or operator requests additional time and such request is approved in writing by the commissioner.

(4) Not more than 30 days after completing any additional or supplemental action undertaken pursuant to this subsection, the owner or operator shall:

(A) Prepare a report that fully describes the additional or supplemental action taken. This report shall include the following information:

(i) A detailed description of all action undertaken and any revision to the conceptual site model based upon such additional or supplemental action;

(ii) The information specified in subsection (h)(2)(A) of this section, subsection (i)(3)(A) of this section or subsection (i)(4)(A) of this section, as applicable;

(iii) A plan and schedule for taking any further additional or supplemental action; and

(iv) Any other information specified by the commissioner on such form.

(B) Retain the report prepared pursuant to subparagraph (A) of this subdivision and submit to the commissioner a monitoring and progress status form which shall include a certification that the additional or supplemental action required by subdivision (1) of this subsection has been completed, specify any additional or supplemental action needed or recommended, and any other information requested by the commissioner on such form; and

(C) Submit the report required by subparagraph (A) of this subdivision to the commissioner if, pursuant to subsection (f)(3) of this section, the commissioner has notified the owner or operator that commissioner review and approval of reports is required.

(*l*) **Progress reports.**

Unless otherwise specified by the commissioner in writing, the owner or operator of an underground storage facility shall submit a quarterly monitoring and progress status form 90 days after the discovery of a confirmed release, and every 90 days thereafter, until all actions required by this section have been completed.

(m) **Public participation.**

(1) For each confirmed release for which a remedial action plan is prepared, prior to the implementation of such plan, the owner or operator of the underground storage facility where the remedial action is being implemented shall provide notice to the public of the need for such remedial action by means designed to reach those members of the public directly affected by the release and the planned remedial action. This notice may include public notice in local newspapers, signage, public service announcements, publication in a state register, letters to individual households, or personal communication. The commissioner may, in writing, specify a particular type of notice that shall be provided. If such release is in an environmental justice community, as defined by section 22a-20a of the Connecticut General Statutes, the owner or operator shall provide such notice in writing in all languages spoken by not less than fifteen per cent of the population that resides within one-half-mile radius of the release.

(2) The owner or operator shall ensure that all documents required pursuant to this section are made available to any member of the public, in a reasonable manner, upon request. The owner or operator shall provide such information within 30 days of any such request, unless the owner or operator and requester agree

upon a different time period.

(n) **Fees.**

(1) During Investigation and Implementation of Remedial Actions

Beginning 12 months after the date of discovery of a release, the owner or operator of an UST or underground storage facility shall pay an annual fee to the commissioner until completion of remedial action form has been submitted or approved by the commissioner, if required under subsection (i) of this section. Such fee shall begin at $1,000 and shall be due and payable on the anniversary of the date of discovery of the release. The annual fee required by this subdivision shall increase by $1,000 on each following anniversary date until completion of remedial action form has been submitted or approved by the commissioner, if required under subsection (i) of this section provided, at the end of year 5 after the date of discovery of a release, such fee shall not exceed $5,000.00 for each year thereafter. If such completion of remedial action form is rejected by the commissioner, payment of such fees shall resume. The fee schedule shall be as follows:

Fee payable on anniversary of discovery pursuant to (n)(1)				
1	2	3	4	5+
$1,000.00	$2,000.00	$3,000.00	$4,000.00	$5,000.00

(2) During Post-Remedial Monitoring

(A) Two years after the date the completion of remedial action form has been submitted to the commissioner as required by subsection (i) of this section, if monitoring has failed to document compliance with the groundwater provisions of the RSRs, the owner or operator of the UST or underground storage facility shall pay an annual fee to the commissioner until monitoring demonstrates compliance as documented by submittal of a monitoring and progress status form, or as approved by the commissioner if required under subsection (i) of this section. Such fee shall begin at $1,000 and shall be due and payable on the anniversary of the date 2 years after the remedial action form has been submitted to the commissioner. Such fee shall increase by $1,000 on each following anniversary date until compliance has been achieved, provided, at the end of the 6th year after the remedial action form has been submitted, such fee shall not exceed $5,000.00 for each year thereafter.

(B) If the UST is in post remedial monitoring as of {insert effective date of regulations}, the owner or operator of the UST or underground storage facility shall pay an annual fee to the commissioner until monitoring demonstrates compliance as documented by submittal of a monitoring and progress status form, or as approved by the commissioner, if required under subsection (i) of this section, beginning {insert date two years after effective date of regulations}. Such fee shall begin at $1,000 and shall be due and payable on the anniversary of the date 2 years after the remedial action form has been submitted to the commissioner. Such fee shall increase by $1,000 on each following anniversary date until compliance has been achieved, provided, at the end of the 6th year after the remedial action form has been submitted, such fee shall not exceed $5,000.00 for each year thereafter.

(C) If such monitoring and progress status form is rejected by the commissioner, payment of such fees shall resume.

Fee payable on anniversary of remedial action form submission pursuant to (n)(2) beginning at year 2				
2	3	4	5	6+
$1,000.00	$2,000.00	$3,000.00	$4,000.00	$5,000.00

Sec. 22a-449(d)-107. [Out-of-service] Closure of an UST [systems and closure] system

(a) [**Temporary closure] Closure.**

(1) [When an UST system is temporarily closed, owners and operators shall continue operation and maintenance of corrosion protection in accordance with subsections 22a-449 (d)-103 (b) of these regulations, and any release detection in accordance with section 22a-449 (d)-104 of these regulations. Section 22a-449 (d)-105 and section 22a-449 (d)-106 of these regulations shall be complied with if a release is suspected or confirmed. However, release detection other than monthly measurement recording for residue and water level in the UST system in accordance with section 22a-449 (d)-104 of these regulations shall not be required as long as the UST system is empty and has never been subject to a failure. The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system] The owner or operator of a tank or piping undergoing closure shall notify the commissioner at least 30 days before beginning such closure. Notice of such closure shall be provided on a form and manner prescribed by the commissioner in accordance with section 22a-449(d)-114 of the UST regulations.

(2) [When an UST system is temporarily closed for 3 months or more, owners and operators shall also comply with the following requirements] When closure is undertaken, the owner or operator of an UST system shall ensure that:

(A) [Leave vent lines open and functioning; and] A person with the training specified in this subparagraph who is responsible for conducting such closure is present at the underground storage facility. Such person responsible for conducting closure shall, before such closure, have received a certification of successful completion of 40-hour Hazardous Waste Operations and Emergency Response training under 29 CFR 1910.120, successfully passed the International Code Council Decommissioning Exam U2 or an examination listed on the department's internet website, and received at least 8 hours of annual Hazardous Waste Operations and Emergency Response refresher training required under 29 CFR 1910.120, as applicable;

(B) [Cap and secure all other lines, pumps, manways, and ancillary equipment.] The entire UST system is emptied and cleaned by removing all liquids and accumulated sludges in accordance with a code of practice developed by a nationally recognized association, provided the owner or operator shall not use a method to comply with this subsection if the commissioner has posted on the department's internet website that use of such method is unacceptable.

(C) After removal of such liquids and sludges:

(i) For each tank or UST not being closed in place, remove from the ground; or

(ii) For each tank or UST being closed in place, prior to filling the UST with a solid inert material, conduct the requirements prescribed in subdivisions (D), (E) and (F) of this subsection; and

(iii) All piping shall be removed from the ground or capped.

(D) Not later than 5 days after completing the events described in subparagraphs (B) and (C) of this subdivision, the owner or operator shall retain a person with a minimum of 3 years of experience and training in selecting and taking samples and shall have an understanding of the appropriate analytical methods for products stored in the UST system. Such person shall perform an assessment evaluating all locations where contamination is most likely to be present at the underground storage facility to determine whether no further action is required or whether additional action is required due to the presence of a confirmed release or suspected release at the underground storage facility. This evaluation shall include sampling from all sides and the bottom of the area where a tank has been removed or closed in-place, areas of staining, areas where holes or perforation in the removed tank are visible, and areas where spill buckets, containment sumps, or dispensers were used. The evaluation of piping undergoing closure shall include at least one sample taken at every 10-foot interval of piping where contamination is most likely to be present, but for any interval of less than 10 feet, at

least one sample shall be taken. The selection of sample types, sample locations, and analytical methods shall take into account: the nature of any stored substance, the type of backfill, the depth to ground water, the presence of rainwater or groundwater, and other factors appropriate for identifying the presence of a suspected or confirmed release;

(E) Sample collection and analysis conducted for the assessment required by subparagraph (D) of this subdivision shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory that is either certified by the Connecticut Department of Public Health or approved in writing by the commissioner; and

(F) All analytical data used to comply with this section shall be scientifically valid and defensible, with a level of precision, accuracy, and sensitivity commensurate with its intended use. All analytical data shall include an analytical data quality assessment and data usability evaluation prepared by individuals qualified to make such assessment or evaluation in accordance with the requirements in the RSRs. If the commissioner determines that analytical data is not scientifically valid and defensible, or not of a sufficient level of precision, accuracy, and sensitivity to support the intended use of the data, the commissioner shall identify in writing the reasons for such conclusions and such data shall not be relied upon to demonstrate compliance with this section.

(3) [When an UST system is temporarily closed for more than 12 months, owners and operators shall permanently close the UST system if it does not meet either performance standards in subsection 22a-449 (d)-102 (a) of these regulations for new UST systems or the upgrading requirements in section 22a-449 (d)-110 of these regulations, except that the spill and overfill equipment requirements do not have to be met. Owners and operators shall permanently close the substandard UST systems at the end of this 12-month period in accordance with subsections 22a-449 (d)-107 (b), (c), (d) and (e) of these regulations, unless the implementing agency provides prior written approval for extension of the 12-month temporary closure period. Owners and operators shall complete a site assessment in accordance with subsection 22a-449 (d)-107 (c) of these regulations before such an extension can be applied for.] If at any time during closure a release is:

(A) Suspected, then the owner or operator of the UST system shall comply with section 22a-449(d)-105 of the UST regulations; and

(B) Confirmed, then the owner or operator of the UST system shall comply with section 22a-449(d)-106 of the UST regulations.

(4) Closure is complete only after a determination in the assessment completed in accordance with subdivision (2)(D) of this subsection finds that:

(A) No further action is required;

(B) Additional actions are required under section 22a-449(d)-105 of the UST regulations; or

(C) Additional actions are required under section 22a-449(d)-106 of the UST regulations.

(b) [**Permanent closure] Closure notification.**

The owner or operator of a tank or piping undergoing closure shall notify the commissioner not less than 30 days before beginning closure and not later than 30 days after completion of such closure. Notices of such closure shall be provided on a form and manner prescribed by the commissioner in accordance with section 22a-449(d)-114 of the UST regulations.

[(1) At least 30 days before beginning permanent closure under subdivision 22a-449 (d)-107 (b) (2) of these regulations, or within another reasonable time period determined in writing by the implementing agency, owners and operators shall notify the implementing agency of their intent to permanently close, unless such action is in response to corrective action. The required assessment of the excavation zone under subsection 22a-449 (d)-107 (c) of these regulations shall be performed after notifying the implementing agency but before completion of the permanent closure.

(2) To permanently close an UST system, owners and operators shall comply with NFPA 30 and empty and clean it by removing all liquids and accumulated sludges. All UST systems taken out of service permanently shall also be either removed from the ground or filled with an inert solid material.

(3) The following cleaning and closure procedures may be used to comply with subsection 22a-449 (d)-107 (b) of these regulations:

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

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

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

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

(c) [**Assessing the site at closure.**] **Closure report.**

[(1) Before permanent closure is completed, owners and operators shall measure for the presence of a release where contamination is most likely to be present at the UST site. Such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations. In selecting sample types, sample locations, and measurement methods, owners and operators shall consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release. Sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the Connecticut Department of Health Services to perform such analyses. The requirements of this section are satisfied if one of the external release detection methods allowed in subdivisions 22a-449 (d)-104 (e) (5) and (6) of these regulations is operating in accordance with the requirements in subsection 22a-449 (d)-104 (e) of these regulations at the time of closure and has been and is in compliance with section 22a-449 (d)-104 of these regulations, and indicates no release has occurred.

(2) If contaminated soils, contaminated ground water, or free product as a liquid or vapor is discovered under subdivision 22a-449 (d)-107 (c) (1) of these regulations, or by any other manner, owners and operators shall begin corrective action in accordance with section 22a-449 (d)-106 of these regulations.]

(1) Not later than 60 days after the removal of or rendering an UST unusable or removal of piping, the owner or operator shall ensure that a detailed report is prepared regarding the closure. Such report shall include, at a minimum:

(A) A description of the underground storage facility, including UST systems in use or removed from the facility and general characteristics of the area in which the facility is located;

(B) A detailed description of the activities undertaken to close the tank or piping;

(C) A detailed description and justification for the sample locations, sample depths, analytical methods used, and quality assurance/quality control measures taken;

(D) A detailed analysis of the analytical results. This analysis shall include:

(i) All sampling results and a justification for disregarding or not using any sampling result;

(ii) A description of the distribution and concentration of any substance in soil or groundwater that is or may have been released from the underground storage facility;

(iii) A description of the general characteristics of soil in the vicinity of the underground storage facility;

(iv) A map showing the extent and concentration of all releases, including the location of samples;

(v) The tabulated analytical results of all laboratory analysis of soil and groundwater;

(vi) A description of the experience and training of the person undertaking the assessment required by subsection (a)(2)(D) of this section; and

(vii) Any other information specified by the commissioner.

(2) The owner or operator shall retain the closure report and, within 30 days of completion of such report,

notify the commissioner on a form prescribed by the commissioner that such report has been completed. In addition, the closure report shall be submitted to the commissioner, on a form and in a manner specified by the commissioner if:

(A) The results of the assessment undertaken pursuant to subsection (a)(2)(D) of this section indicate an exceedance of any applicable criterion of the RSRs or indicate the presence of substance for which there is no criterion under the RSRs; or

(B) The commissioner requests in writing that the closure report be submitted. The report shall be submitted within the time frame specified in any such request. If no time frame is specified in the request, the report shall be submitted to the commissioner not later than 30 days from the receipt of a request.

(d) [**Applicability to previously closed UST systems.] Additional actions.**

[When directed by the implementing agency, the owner and operator of an UST system permanently closed before December 22, 1988 shall assess the excavation zone and close the UST system in accordance with this subsection if releases from the UST may, in the judgment of the implementing agency, pose a current or potential threat to human health and the environment, or if, in the judgement of the implementing agency, the owner or operator of the UST system has violated any of the requirements in these regulations.] If the actions undertaken pursuant to subsection (a) of this section, or the closure report prepared pursuant to subsection (c) of this section are not satisfactory to the commissioner, the commissioner shall notify the owner or operator in writing identifying what the commissioner deems unsatisfactory, including the reasons why and what additional actions are necessary. The owner or operator shall undertake any action requested by the commissioner within a time frame specified by the commissioner. If no time frame is specified in any such request, the requested actions shall be undertaken not later than 60 days from the date of any such request.

(e) [**Closure records.] Applicability to previously closed systems.**

[Owners and operators shall maintain records in accordance with subsection 22a-449 (d)-103 (e) of these regulations that are capable of demonstrating compliance with closure requirements under section 22a-449 (d)-107 of these regulations. The results of the excavation zone assessment required in subsection 22a-449 (d)-107 (e) of these regulations shall be maintained for at least 5 years beyond completion of the UST system permanent closure in the following ways:

(1) By the owners and operators who took the UST system out of service, and By the current owners and operators of the UST system site.] If a release or potential release from an UST system closed before July 28, 1994 may, in the judgment of the commissioner, pose a current or potential threat to human health or the environment, when directed by the commissioner, the owner or operator shall comply with the closure procedures in this section and comply with section 22a-449(d)-105 of the UST regulations or section 22a-449(d)-106 of the UST regulations, as applicable.

[(f) **Abandoned UST Systems.**

No person or municipality shall use or operate an abandoned UST system.]

Sec. 22a-449(d)-108. Class A, B, and C [Operator training required] operator requirements

(a) [**Training and certification] General requirement.** No person shall own or operate an UST system without designating Class A, B, and C operators who meet the requirements of this section.

[(1) Effective August 8, 2012, no person shall own or operate a UST or UST system without designating Class A, B, and C Operators who have been trained and certified in accordance with an approved training program.

(2) On or before August 8, 2012, for each existing underground storage facility in the state, owners or operators shall submit to the commissioner a statement, in a format approved by the commissioner and signed by the owner or operator and the designated Class A and Class B Operators, identifying the following: (A) the

names of the designated Class A and B Operators, (B) the approved training programs from which they obtained their certification, (C) the dates of certification and (D) the dates such certification expires. For underground storage facilities whose USTs or UST systems begin operation after August 8, 2012, this information shall be submitted prior to beginning operation.

(3) Effective August 8, 2012, at each underground storage facility, owners or operators shall post operator response guidelines meeting the requirements of subsection (c) (1) of this section.

(4) Effective August 8, 2012, at each underground storage facility, owners or operators shall post an information sheet regarding all Class C Operators assigned to that underground storage facility. Such information sheet shall include: (A) the names of each designated Class C Operator, (B) the name of the approved training program(s) from which each Class C Operator obtained her or his certification, or the name of the certified Class A or B Operator who trained each Class C Operator, (C) the certification dates for each Class C Operator, (D) the expiration dates of each such certification, and (F) the most recent date of Class C Operator training.

(5) After August 8, 2012, owners or operators shall revise and resubmit to the commissioner a signed statement that includes the information required in subsection (b) of this section whenever there is a change in designated Class A or B Operators, a change of approved training programs, or when a designated Class A or B Operator has been retrained as ordered by the commissioner pursuant to subsection (e) of this section, not more than 30 days after the change for each affected underground storage facility.

(6) After August 8, 2012, newly designated Class A and B Operators shall be trained in accordance with an approved training program not more than 30 days after being designated and newly designated Class C Operators shall be trained in accordance with an approved training program or by a certified Class A or B Operator before assuming the responsibilities of the Class C Operator.

(7) If an approved operator training program has had its approval revoked pursuant to subsection (d) (1) of this section, any Class A, B, or C Operator who has been trained and certified by this program shall remain trained and certified unless (A) they are directed by the commissioner to retrain pursuant to subsection (e) of this section, or (B) their certification expires pursuant to the previously approved training program curriculum.]

(b) **Designation of class A, B, and C operators.**

(1) The owner or operator of an underground storage facility shall designate and maintain such designation in writing, of at least one Class A operator, one Class B operator, and one Class C operator for each underground storage facility. The owner or operator shall only designate a Class A, B, and C operator who maintains a current and valid certificate demonstrating that such operator is in compliance with the requirements of this section. Each designation shall be signed and acknowledged by each Class A, Class B or Class C operator being designated. An individual holding multiple certifications may be designated by an owner or operator to satisfy the requirements of this subdivision.

(2) Not later than 30 days after each designation required by this subsection, including any subsequent change made thereto, the owner or operator shall provide the information specified by the commissioner regarding each Class A and B operator designated under subdivision (1) of this this subsection. Such information shall be provided on a form and in a method prescribed by the commissioner.

(3) At each underground storage facility, the owner or operator shall post a list showing all Class C operators designated for that facility at a prominent location visible to the public. For a Class C operator such posting shall include:

(A) The names of each designated Class C operator;

(B) A certification signed by a Class B operator who trained the C operator; and

(C) The dates that certification for each Class C operator began and will expire.

[(b)] (c) **[Operator Training Program Requirements.] Requirements for operators to be present at an underground storage facility.**

[Any operator training program shall either be approved by the commissioner pursuant to subdivision (1) or (3) of this subsection, or deemed approved pursuant to subdivision (2) of this subsection to meet the requirements of this section.

(1) An operator training program shall be approved in writing by the commissioner. The commissioner shall approve a program if after submittal of the training curriculum and instructor's qualifications to the commissioner for review, the commissioner finds that the program meets the following requirements:

(A) Class A Operator training shall include, but not be limited to:

(i) Familiarization with applicable federal, state, and local law regarding the operation of USTs and UST systems, including those provisions which apply to notification requirements, spill prevention, overfill prevention, release detection, corrosion protection, emergency response, product compatibility, release and suspected release reporting, temporary and permanent closure requirements, operator training, and financial responsibility documentation requirements;

(ii) Certification that an appropriately administered and evaluated test demonstrating knowledge of the applicable statutes and regulations regarding the operation of USTs and UST systems, including, but not limited to, those provisions listed in subparagraph (A)(i) of this subdivision, has been passed;

(iii) Requirement for retraining or refresher training at least every 2 years following initial training.

(B) Class B Operator training shall include, but not be limited to:

(i) Familiarization with applicable federal, state, and local law regarding the operation of USTs and UST systems;

(ii) Familiarization with the components of USTs and UST systems, the materials of which UST and UST system components are composed, methods of UST and UST system release detection, including the best available technology, UST and UST system spill protection, overfill prevention, release detection, corrosion protection, emergency response requirements, product compatibility, reporting and recordkeeping requirements, and Class C Operator requirements;

(iii) Familiarization with conducting and documenting monthly maintenance inspections pursuant to subsection (c) of this section and yearly maintenance inspections as applicable.

(iv) Certification that an appropriately administered and evaluated test demonstrating such knowledge has been passed;

(v) Requirement for retraining or refresher training at least every 2 years following initial training.

(C) Class C Operator training shall include, but not be limited to:

(i) Familiarization with the operator response guidelines, including, but not limited to, thorough knowledge of the required response to emergencies and alarms;

(ii) Familiarization with the layout of a typical UST system, as well as familiarity with the particular layout of the UST System or UST Systems at the underground storage facility or facilities at which the Class C Operator has responsibilities;

(iii) Familiarization with reading alarm enunciation panels;

(iv) Certification, signed by the Class A or B Operator or the approved training program, that an appropriately administered and evaluated test demonstrating such knowledge has been passed;

(v) Requirement for retraining or refresher training at least every 2 years following initial training.

(2) The following operator training programs shall be deemed approved by the commissioner:

(A) For Class A Operator training, certification as a Connecticut Class A UST System Operator by the International Code Council (ICC) every 2 years.

(B) For Class B Operator training, certification as a Connecticut Class B UST System Operator by the International Code Council (ICC) every 2 years.

(C) For Class C Operator training, training provided by the designated Class A or Class B Operator at the underground storage facility. Such training shall include a physical tour of the underground storage facility, instruction regarding the alarm enunciation panel and appropriate responses to emergencies and alarms as set forth in the posted operator response guidelines. Following the initial training, retraining or refresher training shall be completed at least every 2 years.

(3) The commissioner may also approve, as meeting Connecticut requirements, Class A, B, and C Operator training programs conducted or approved by other states or the ICC.]

The owner or operator of an underground storage facility shall ensure that a Class B or Class C operator is present at an underground storage facility at all times when any regulated substance is or may be dispensed at such facility. Except, the owner or operator of an underground storage facility where regulated substances are not available for sale to any person, such as a facility where access is limited to use by employees, is not required to ensure that there is either a Class B or Class C operator at an underground storage facility at all times.

[(c)] (d) **[Additional Operator Requirements.] Requirements for class A, B, and C operators.**

[(1) Operator Response Guidelines shall be in written form and include reporting procedures for releases and suspected releases, emergency contact phone numbers, malfunctioning equipment lock- out/tag-out and notification procedures, and initial mitigation protocol for releases, suspected releases and other emergencies.

(2) Monthly visual inspections meeting the following minimum requirements shall be conducted at all underground storage facilities:

(A) Inspections shall be conducted by or under the direction of the Class A or B Operator.

(B) The results of each inspection shall be recorded in a monthly inspection report and maintained on-site for a period of no less than three years.

(C) The items listed in subclauses (i) through (ix), inclusive, of this subparagraph shall be inspected periodically, as indicated. For each item, the inspector shall inspect the item and record on the inspection report either “no defect” or “defect”, to reflect the status of the item. For any items for which a “defect” status has been recorded, repairs shall be performed not later than thirty days after discovery. Each such repair shall be recorded in the inspection report with details as to how such defect was resolved. Such activities as required by this subparagraph shall be performed in accordance with the Petroleum Equipment Institute RP900-08, “Recommended Practices for the Inspection and Maintenance of UST Systems”.

(i) Inspect monthly vent risers;

(ii) Inspect monthly pressure/vacuum vent caps;

(iii) Inspect monthly spill buckets, new piping containment sumps and new under-dispenser containment sumps;

(iv) Inspect monthly dry break poppet valves to ensure that each such valve forms a continuous seal, including but not limited to ensuring that each valve depresses evenly across the valve seat and that it reseats properly;

(v) Inspect monthly motor fuel dispenser hoses to ensure that there are no tears, leaks, holes, kinks, crimps or defects of any kind;

(vi) Inspect monthly motor fuel dispenser cabinet interiors;

(vii) Inspect monthly transfer and dispensing areas to ensure that any release has been reported and cleaned in accordance with all applicable federal, state, and local requirements;

(viii) Inspect monthly leak and product monitoring device alarm enunciation panels to ensure the proper

operation of leak and product monitoring and detection systems;

(ix) Inspect annually overfill prevention devices.

(D) Should any oil, water, or debris be discovered in any secondary containment component of any UST of UST system, such oil, water, or debris shall be removed and disposed in accordance with all applicable federal, state, and local requirements.

(3) The Class A Operator shall ensure that all UST system components, including but not limited to, tanks, pumps, and appurtenances, that will contact, store or dispense petroleum are compatible with the petroleum or bio-fuel blends that will be stored or dispensed.

(4) Delegation of the responsibilities of this subsection to designated Class A, B, and C Operators shall not relieve the owner or operator of a UST or UST system from liability for non-compliance with the requirements of this subsection.]

The owner or operator of an underground storage facility shall only retain Class A, B, and C operators designated to an underground storage facility who meet the following requirements:

(1) Requirements For a Class A or Class B Operator.

No person shall be considered a Class A or Class B operator or undertake the requirements of a Class A or Class B operator unless such person:

(A) Has a valid certificate, issued by a program approved by the commissioner pursuant to subsection (f) of this section, demonstrating that such person has passed the examination applicable to the classification on the certificate; and

(B) Has a working familiarity with the information specified in this subparagraph, as applicable.

(i) A Class A Operator shall have knowledge of all legal requirements in the State of Connecticut regarding the operation and maintenance of UST systems. At a minimum, this shall include the purpose, methods and functions of the following at each underground storage facility:

(I) Notification requirements, including the method used for notification such as electronic notification;

(II) Spill and overfill prevention;

(III) Release detection;

(IV) Corrosion protection;

(V) Emergency response including release and suspected release reporting;

(VI) Product and equipment compatibility;

(VII) Temporary and permanent closure;

(VIII) Financial responsibility; and

(IX) Related reporting, recordkeeping, testing and inspections.

(ii) A Class B operator shall have knowledge of the implementation of the applicable statutory and regulatory requirements at each particular underground storage facility at which such Class B operator is designated. At a minimum, this shall include the purpose, methods and functions of the following at each underground storage facility for which a person is designated as a Class B operator:

(I) The components of each UST system;

(II) The material each UST system component is composed of;

(III) Release detection;

(IV) UST system spill protection;

(V) Spill and overfill prevention;

(VI) Corrosion protection;

(VII) Emergency response including release and suspected release reporting;

(VIII) Product and equipment compatibility;

(IX) Reporting, recordkeeping, testing, and inspections;

(X) Training requirements for Class C operators; and

(XI) Operation and maintenance of each UST system.

(2) Requirements For a Class C Operator.

No person shall be considered a Class C operator or undertake the requirements of a Class C operator unless such person:

(A) Has a valid certificate issued by a Class B operator who is designated as a Class B operator at the same underground storage facility where the Class C operator is designated. A Class C operator certificate shall be issued only upon the successful completion of the following training for each underground storage facility where the Class C operator has been designated:

(i) A thorough familiarization with alarm and emergency indicators including automatic tank gauge or enunciation panels, and the ability to take the action necessary in response to an alarm or emergency indicator;

(ii) A thorough familiarization with the operator response guidelines cited in section 22a-449(d)-103(a) of the UST regulations; and

(iii) Knowledge of the location of any records required by the UST regulations; and

(B) Has the knowledge and ability to serve as the first line of response to an event indicating an emergency condition and has knowledge of the location of all records for each underground storage facility for which the Class C operator is designated. This shall include the ability to immediately shut off the flow of a regulated substance to a dispenser in response to any emergency or an UST system alarm caused by a release, and to immediately notify the owner or operator, the Class A or Class B operator, and any necessary emergency responders.

(3) Persons Seeking Multiple Operator Classifications. Except for a person designated as a Class B Operator for an underground storage facility which shall automatically qualify such person as a Class C operator for such facility without any further training, any individual designated as an operator for more than one classification shall successfully complete the requirements of each such classification.

(4) Certificates.

(A) Certificates for Class A and Class B operators. The certificate required for a Class A or Class B operator shall be:

(i) Effective only if issued by a program approved by the commissioner pursuant to subsection (f) of this section;

(ii) Issued when the person named on such certificate has passed the examination for the class of operator noted on the certificate;

(iii) Effective for not more than 2 years from the date of issuance; and

(iv) Nontransferable.

(B) Certificates for Class C operators. The certificate required for a Class C operator shall be:

(i) Effective only if issued by a Class B operator who is designated as a Class B operator at the same underground storage facility where the Class C operator has been designated;

(ii) Issued when the person named on such certificate has successfully completed the training as specified in subdivision (2)(A) of this subsection;

(iii) Effective for not more than 2 years from the date of issuance; and

(iv) Nontransferable.

(C) Submission of certificate to the commissioner.

Any certificate for a Class A, B, or C operator shall be provided to the commissioner upon request within the time frame specified in any such request. If no time frame is specified in the request, the requested

certificate shall be submitted to the commissioner not later than 30 days after receipt of a request.

(5) Maintaining Certification As a Class A, B, or C Operator.

A Class A, B, or C operator certification shall expire 2 years from the date the most recent certificate was issued to such operator.

(A) A person may maintain active status as a Class A or B operator only if such person:

(i) Obtains a new certificate prior to the expiration of the most recent certificate by passing an examination for a Class A or Class B operator provided such certificate is issued by a program approved by the commissioner pursuant to subsection (f) of this section; and

(ii) Maintains a working familiarity, including any changes to the underground storage facility, with the information specified in subdivision (1)(B) of this subsection.

(B) A person may maintain active status as a Class C operator only if such person:

(i) Obtains a new certificate prior to the expiration of the most recent certificate by completing the training for a Class C Operator required by subdivision (2) of this subsection, provided such certificate is issued by a Class B operator who is designated as a Class B operator at the same underground storage facility where the Class C operator has been designated; and

(ii) Maintains a working familiarity, including any changes to the underground storage facility, with the information specified in subdivision (2)(B) of this subsection.

(6) Additional Required Retraining.

(A) If the commissioner determines that an UST or an UST system is not in compliance with a requirement of the UST regulations and provides notice to the owner or operator of such non-compliance, the owner or operator of an UST system shall:

(i) Provide notice of such non-compliance to the Class A and Class B operator designated for the underground storage facility. Failure to provide such notice shall result in such Class A and Class B operators no longer being designated as the operators for the underground storage facility; and

(ii) Ensure that both the Class A and Class B operator designated for the underground storage facility at which the non-compliant UST or UST system is located are replaced or are retrained and obtain a new certificate demonstrating each such operator has passed an examination for a Class A or Class B operator, as applicable, provided such certificate is issued by a program approved by the commissioner pursuant to subsection (f) of this section. Any such retraining and recertification shall include the area of non-compliance and such replacement or retraining and recertification shall occur not later than 30 days after the owner or operator receives notification by the commissioner of such non-compliance;

(B) Retraining and recertification or replacement of a Class A or Class B operator pursuant to this subdivision shall not excuse non-compliance nor create a presumption that enforcement for non- compliance will not or should not be taken.

(7) Revocation or Suspension of Certification. The commissioner may suspend or revoke an operator certification pursuant to section 22a-3a-5 of the Regulations of Connecticut State Agencies. The commissioner shall notify the owner or operator, as applicable, of such suspension or revocation.

(8) Class A, B and C Operator Responsibilities.

(A) In addition to any other requirement specified in this section, the owner or operator of an UST system shall ensure that the designated Class A, B and C operator, at a minimum, perform the following:

(i) A Class A operator shall:

(I) Manage resources and personnel, including Class B operators and Class C operators, to achieve and maintain compliance with applicable requirements;

(II) Provide current financial responsibility documents to be maintained at the underground storage facility; and

(III) Update all UST notifications as required by section 22a-449(d)-114 of the UST regulations or ensure that such updates are performed.

(ii) A Class B operator shall:

(I) Monitor and maintain all release detection method for proper operation;

(II) Maintain proper operation of all release prevention equipment;

(III) Monitor and maintain all spill and overfill equipment for proper operation;

(IV) Maintain any record as required by section 22a-449(d)-114 of the UST regulations;

(V) Comply with all reporting requirements as required by the UST regulations;

(VI) Maintain UST system equipment in proper operation, including all testing required by the UST regulations; and

(VII) Train and issue certificates to Class C operators.

(iii) A Class C operator shall:

(I) Implement the operator response guidelines in the event of an alarm, spill, or release; and

(II) Provide access to any UST and UST system record for inspection by the commissioner or notify the commissioner of the location of records kept at a centralized location.

(B) The designation of responsibilities under this subsection or the delegation of responsibilities specified in this subsection to designated Class A, B, and C operators shall not waive or relieve the owner and operator of an UST system from liability for non-compliance with any requirement of the UST regulations.

[(d)] (e) **[Revocation of] Recordkeeping for [Operator Training Program Approval] operator training.**

[(1) If the commissioner determines that an approved or deemed approved operator training program has become insufficient to adequately train Class A, B, or C Operators, the commissioner shall revoke the approval of the operator training program. Evidence of such insufficiency shall include, but not be limited to, inadequately trained Class A, B, or C Operators; compliance issues; or a failure to document completion of required training.

(2) An operator training program may be re-approved if it is demonstrated that all program defects have been corrected and if a revised curriculum and instructor's qualification is submitted to the commissioner and approved pursuant to subsection (b) of this section.

(3) An approved operator training program may withdraw as an approved operator training program by making such a request in writing to the commissioner.]

The owner or operator of an UST system or underground storage facility shall maintain all applicable records demonstrating compliance with the requirements of this section.

[(e)] (f) **[Operator Retraining.] Operator training programs.**

[If the commissioner determines that a UST or UST system is not in compliance with the release prevention and release detection measures, then the commissioner shall order that the responsible Class A, B, or C Operator assigned to that UST or UST system be retrained and recertified in accordance with an approved training program, not later than 30 days after being so ordered or within such other time as the commissioner specifies. Retraining pursuant to this subsection shall not excuse non-compliance nor create a presumption against any related enforcement.]

(1) Approval or Disapproval.

(A) Upon request by any person, the commissioner may approve a proposed program to be used for training and retraining of Class A and Class B operators. Any program approved by the commissioner shall include an examination for each class of operator. Any program approval issued pursuant to this subsection shall expire on the date specified in the approval and may include any conditions deemed necessary by the commissioner. Any request for approval of a program under this subparagraph shall be on a form prescribed by the commissioner. The commissioner shall not approve any program unless the commissioner determines

that the proposed program provides adequate instruction appropriate to the class of operator; the examination tests the level of knowledge necessary for the class of operator being tested; the proposed program ensures the integrity of the examination administration and grading process by including a demonstration that the person taking an examination and the person who is issued a certificate are the same person; if an instructor is used, that such instructor possesses adequate experience and qualifications; and provides any other information specified by the commissioner.

(B) A program approved by the commissioner for Class A or B operators under subparagraph (A) of this subdivision shall be posted on the department's internet website.

(C) Not later than {insert date 90 days of the effective date of the regulations}, any person with a program previously approved by the commissioner shall submit a new request for approval of such program in accordance with this subdivision.

(2) Revocation of Approved Training Program.

(A) If the commissioner determines that a training program, including an examination, previously approved by the commissioner under subdivision (1)(A) of this subsection is no longer adequate or is otherwise deficient, the commissioner may revoke the approval of such program. The commissioner shall provide written notice of any such revocation including the basis for such revocation. A training program approval may be revoked due to inadequate or incorrect course content, inadequately trained operators, an inadequate examination, a failure to document completion of required training, or issues with the integrity of the program, examination or grading.

(B) A training program may be re-approved if it is demonstrated to the satisfaction of the commissioner that all program defects have been corrected and if a revised curriculum and instructor's qualification is submitted to the commissioner and approved pursuant to subdivision (1)(A) of this subsection.

(C) If the approval of a program is revoked by the commissioner pursuant to subparagraph (A) of this subdivision, the certificate issued to any Class A or B operator under such program shall remain valid until the expiration of such certificate or issuance of a written notification by the commissioner to seek re-training pursuant to subsection (d)(6) of this section, whichever occurs first.

Sec. 22a-449(d)-109. Financial responsibility

(a) **Applicability.**

(1) [Section 22a-449(d)-109 of these regulations applies to owners and operators of all petroleum underground storage tank (UST) systems except as otherwise provided in subsection 22a-449(d)-109 (a) of these regulations.

(2) Owners and operators of petroleum UST systems are subject to these requirements if they are in operation on or after the date for compliance established in subsection 22a-449(d)-109 (b) of these regulation.

(3) State and Federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are exempt from the requirements of this section.

(4) The requirements of this section do not apply to owners and operators of any UST system described in subdivisions 22a-449(d)-101 (a) (2) and (3) of these regulations.

(5) If the owner and operator of a petroleum underground storage tank are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in event of

noncompliance. Regardless of which party complies, the date set for compliance at a particular facility is determined by the characteristics of the owner as set forth in subsection 22a-449(d)-109 (b) of these regulations.] This section applies to the owner and operator of a petroleum UST system except as otherwise provided in this section. This section does not apply to the owner and operator of a hazardous substance UST system. State and Federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are exempt from the requirements of this section.

(2) Owners and operators shall ensure at least one of the available financial responsibility instruments required by this section is established or amended by {insert date 90 days after the UST regulations take effect}, unless the financial responsibility instrument fully complies with this section.

[(b) **Compliance dates.** Owners of petroleum underground storage tanks are required to comply with the requirements of section 22a-449(d)-109 of these regulations by the following dates:

(1) 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; January 24, 1989, except that compliance with subdivision 22a-449(d)-109 (e) (2) of these regulations is required by: July 24, 1989.

(2) All petroleum marketing firms owning 100-999 USTs; October 26, 1989.

(3) All petroleum marketing firms owning 13-99 USTs at more than one facility; April 26, 1991.

(4) All petroleum UST owners not described in subdivisions 22a-449 (d)-109 (b) (1), (2) and (3) of these regulations, excluding local government entities; October 26, 1991.

(5) All local government entities; one year from the date of promulgation of additional mechanisms for use by local government entities to comply with financial responsibility requirements for underground storage tanks containing petroleum.]

[(c)](b) **Definition of terms.**

[When used in section 22a-449(d)-109 of these regulations, the following terms shall have the meanings given below:]

In addition to the terms defined in section 22a-449(d)-101 of the UST regulations, when used in this section, the following terms shall have the meanings given below:

(1) "Accidental release" means any sudden or nonsudden release of petroleum from an [underground storage tank] UST that results in a need for corrective action, [and/or] compensation for bodily injury or property damage neither expected nor intended by the owner or operator;

(2) "Bodily injury" shall have the meaning given to this term by applicable state law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury;

(3) "Chief financial officer" in the case of local government owners and operators, means the individual with the overall authority and responsibility for the collection, disbursement, and use of funds by the local government;

[(3)](4) "Controlling interest" means direct ownership of at least 50 percent of the voting stock of another entity;

[(4) Director of the Implementing Agency means the Commissioner of Environmental Protection of the State of Connecticut, or the Commissioner's designee;]

(5) "EPA" means the United States Environmental Protection Agency;

[(5)](6) "Financial reporting year" means the latest consecutive twelve-month period for which any of the following reports used to support a financial test is prepared:
(A) A 10-K report submitted to the SEC;
(B) An annual report of tangible net worth submitted to Dun and Bradstreet; or
(C) An [Annual reports] annual report submitted to the Energy Information Administration or the Rural [Electrification Administration] Utilities Service.
"Financial reporting year" may thus comprise a fiscal or a calendar year period;
[(6)](7) "Legal defense cost" is any expense that an owner or operator or provider of financial assurance incurs in defending against claims or actions brought,
(A) By EPA or a state to require corrective action or to recover the costs of corrective action;
(B) By or on behalf of a third party for bodily injury or property damage caused by an accidental release; or
(C) By any person to enforce the terms of a financial assurance mechanism;

(8) "Local government" means a municipality including any metropolitan district, town, consolidated town and city, consolidated town and borough, city, borough, village, fire and sewer district, sewer district and each municipal organization having authority to levy and collect taxes or make charges for its authorized function;
[(7)] (9) "Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in a release from an [underground storage tank;] UST. This definition is not intended either to limit the meaning of "occurrence" in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of ″occurrence″;
[(8)] (10) "Owner or operator"[,] when the owner or operator are separate parties, refers to the party that is obtaining or has obtained financial assurances;
[(9)] (11) "Petroleum marketing facilities" include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public;
[(10) Petroleum marketing firms are all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms;]
[(11)] (12) "Property damage" shall have the meaning given this term by [applicable] Connecticut state law. This term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage shall not include corrective action associated with releases from tanks which are covered by the policy;
[(12)] (13) "Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of an [underground storage tank] UST through one of the mechanisms listed in subsections [22a-449(d)-109 (f)](e) to (n), inclusive, of [these regulations] this section, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state;
[(13)] (14) "Substantial business relationship" means the extent of a business relationship necessary under [applicable] Connecticut state law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued ″incident to that relationship″ if it arises from and depends on existing economic transactions between the guarantor and the owner or operator;
[(14)] (15) "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition,

"assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions; and

[(15)] (16) "Termination" under [subdivisions 22a-449(d)-109 (h) (2) (A) and (B) of these regulations] subsection (g)(2) of this section means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

[(d)] (c) **Amount and scope of required financial responsibility.**

(1) Owners or operators of petroleum [underground storage tanks] USTs shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum USTs in at least the following per-occurrence amounts:

(A) For owners or operators of petroleum [underground storage tanks] USTs that are located at petroleum marketing facilities, or that handle an average of more than 10,000 gallons of petroleum per month based on annual throughput for the previous calendar year; $1 million.

(B) For all other owners or operators of petroleum [underground storage tanks] USTs; $500,000.

(2) Owners or operators of petroleum [underground storage tanks] USTs shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum USTs in at least the following annual aggregate amounts:

(A) For owners or operators of 1 to 100 petroleum [underground storage tanks] USTs, $1 million; and

(B) For owners or operators of 101 or more petroleum [underground storage tanks] USTs, $2 million.

(3) For the purposes of subdivisions [22a-449(d)-109 (d)] (2), (5) and (6) of this subsection, "a petroleum UST" means a single containment unit and does not mean combinations of single containment units.

(4) Except as provided in subdivision [22a-449(d)-109 (d)] (5) of [these regulations] this subsection, if the owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for:

(A) Taking corrective action;

(B) Compensating third parties for bodily injury and property damage caused by sudden accidental releases; or

(C) Compensating third parties for bodily injury and property damage caused by nonsudden accidental releases, the amount of assurance provided by each mechanism or combination of mechanisms shall be in the full amount specified in subdivisions [22a-449(d)-109] (1) and (2) of [these regulations] this subsection.

(5) If an owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different petroleum [underground storage tanks] USTs, the annual aggregate required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

(6) Owners or operators shall review the amount of aggregate assurance provided whenever additional petroleum [underground storage tanks] USTs are acquired or installed. If the number of petroleum [underground storage tanks] USTs for which assurance shall be provided exceeds 100, the owner or operator shall demonstrate financial responsibility in the amount of at least $2 million of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became

effective. If assurance is being demonstrated by a combination of mechanisms, the owner or operator shall demonstrate financial responsibility in the amount of at least $2 million of annual aggregate assurance by the first-occurring effective date anniversary of any one of the mechanisms combined (other than a financial test or guarantee) to provide assurance.

(7) The amounts of assurance required under [section 22a-449(d)-109 of these regulations] this subsection excludes legal defense costs.

(8) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.

[(e)] (d) **Allowable mechanisms and combinations of mechanisms.**

(1) Subject to the [limitations of] limitation in subdivision [22a-449(d)-109 (e) (2) and (3) of these regulations,] (2) of this subsection:

(A) [an] An owner or operator, that is not a local government, may use any one or combination of the mechanisms listed in subsections [22a-449(d)-109 (f)] (e) to [(n)] (j), inclusive, of [these regulations] this section, as applicable, to demonstrate financial responsibility under this section for one or more [underground storage tanks] USTs.

(B) An owner or operator that is a local government may use any one or combination of the mechanisms listed in subsections (g) to (n), inclusive, of this section, as applicable, to demonstrate financial responsibility under this section for one or more USTs.

[(2) An owner or operator may use a guarantee or surety bond to establish financial responsibility only if the Attorney(s) General of the state(s) in which the underground storage tanks are located has (have) submitted a written statement to the implementing agency that a guarantee or surety bond executed as described in this section is a legally valid and enforceable obligation in that state.]

[(3)] (2) An owner or operator may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this [rule] section, the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor.

[(f)] (e) **Financial test of self-insurance**.

(1) An owner, [or] operator [and/or] or guarantor, may satisfy the requirements of subsection [22a-449(d)-109 (d) of these regulations] (c) of this section by passing a financial test as specified in this section. To pass the financial test of self-insurance, the owner [or], operator [and/or] or guarantor shall meet the criteria of subdivisions [22a-449(d)-109 (f)] (2) or (3) of [these regulations] this subsection based on year-end financial statements for the latest completed fiscal year.

(2)(A) The owner, [or] operator [and/or] or guarantor, shall have a tangible net worth of at least ten times:

(i) The total of the applicable aggregate amount required by subsection [22a-449(d)-109 (d)] (c) of [these regulations] this section, based on the number of [underground storage tanks] USTs for which a financial test is used to demonstrate financial responsibility to [EPA under this section or to a state implementing agency under a state program approved by EPA under 40 CFR part 281] the commissioner;

(ii) The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 264.101, 264.143, 264.145, 265.143, 265.145, 264.147, and 265.147 or to any state implementing agency under a state program authorized by EPA under 40 CFR [part] 271; and

(iii) The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 144.63 or to any state implementing agency under a state program authorized by EPA under 40 CFR [part] 145.

(B) The owner, [or] operator [and/or] or guarantor, shall have a tangible net worth of at least [$10] $20 million.

(C) The owner, [or] operator [and/or] or guarantor shall have a letter signed by the chief financial officer worded as specified in subdivision [22a-449(d)-109 (f)] (4) of [these regulations] this subsection.

(D) The owner, [or] operator [and/or] or guarantor, shall either:

(i) File financial statements annually with the U.S. Securities and Exchange Commission, the Energy Information Administration, or the Rural [Electrification Administration] Utilities Service; or

(ii) Report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet shall have assigned the firm a financial strength rating of [4A or 5A] 4A1, 4A2, 5A1 or 5A2.

(E) The firm's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(3)(A) The owner, [or] operator [and/or] or guarantor shall meet the financial test requirements of section 22a-449(c)-104 of the Regulations of Connecticut State Agencies incorporating 40 CFR 264.147[ ](f)[ ](1), substituting the appropriate amounts specified in subdivisions [22a-449(d)-109] (2)[ ](A) and (2)(B) of [these regulations] subsection (c) of this section for the "amount of liability coverage" each time specified in that section.

(B) The fiscal year-end financial statements of the owner, [or] operator [and/or] or guarantor, shall be examined by an independent certified public accountant and be accompanied by the accountant's report of the examination.

(C) The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(D) The owner, [or] operator [and/or] or guarantor, shall have a letter signed by the chief financial officer, worded as specified in subdivision [22a-449(d)-109] (4) of [these regulations] this subsection.

(E) If the financial statements of the owner, [or] operator [and/or] or guarantor, are not submitted annually to the U.S. Securities and Exchange Commission, the Energy Information Administration or the Rural [Electrification Administration] Utilities Service, the owner, [or] operator [and/or] or guarantor, shall obtain a special report by an independent certified public accountant stating that:

(i) [He] Such accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the latest year-end financial statements of the owner, [or] operator [and/or] or guarantor, with the amounts in such financial statements; and

(ii) In connection with that comparison, no matters came to [his] the attention of such accountant which caused [him] that accountant to believe that the specified data should be adjusted.

(4) To demonstrate that it meets the financial test under subdivisions [22a-449(d)-109 (f)] (2) or (3) of [these regulations] this subsection, the chief financial officer of the owner, [or] operator[,] or guarantor, shall sign, within 120 days of the close of each financial reporting year, as defined by the twelve-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as follows, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted:

LETTER FROM CHIEF FINANCIAL OFFICER

I am the chief financial officer of {insert: name and address of the owner or operator, or guarantor}. This letter is in support of the use of {insert: "the financial test of self-insurance," and/or "guarantee"} to demonstrate financial responsibility for {insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"} caused by {insert: "sudden accidental releases" [an/or] or "nonsudden accidental releases" or "accidental releases"} in the amount of at least {insert: dollar amount} per occurrence and {insert: dollar amount} annual aggregate arising from operating (an) underground storage tank(s) ("UST(s)").

[Underground storage tanks]USTs at the following facilities are assured by this financial test or a financial test under an authorized State program by this {insert: "owner or operator," and/or "guarantor"}: {List for each facility: the name and address of the facility where tanks assured by this financial test are located, and whether tanks are assured by this financial test or a financial test under a State program approved under 40 CFR [part] 281. If separate mechanisms or combinations of mechanisms are being used to assure any of the tanks at this facility, list each tank assured by this financial test or a financial test under a State program authorized under 40 CFR [part] 281 by the tank identification number provided in the notification submitted pursuant to [subsection 22a-449(d)-102 (b)] section 22a-449(d)-114 of [these regulations] the Regulations of Connecticut State Agencies ("RCSA") or the corresponding State requirements.}

A {insert: "financial test," and/or "guarantee"} is also used by this {insert: "owner or operator," or "guarantor"} to demonstrate evidence of financial responsibility in the following amounts under other EPA regulations or [state] State programs authorized by EPA under 40 CFR [parts] 271 and 145:

EPA and State Regulations	**Amount**
Closure (40 CFR 264.143 and 265.143)	$
Post-Closure Care (40 CFR 264.145 and [165.145]265.145)	$
Liability Coverage (40 CFR 264.147 and 265.147)	$
Corrective Action (40 CFR 264.101[ ](b))	$
Plugging and Abandonment (40 CFR 144.63)	$
Closure (state requirement)	$
Post-Closure Care (state requirement)	$
Liability Coverage (state requirement)	$
Corrective Action (state requirement)	$
Plugging and Abandonment (state requirement)	$
Total	$

This {insert: "owner or operator," or "guarantor"} has not received an adverse opinion, a disclaimer of opinion, or a "going concern" qualification from an independent [auditor on his] auditor's financial statements for the latest completed fiscal year.

{Fill in the information for Alternative I if the criteria of subdivision (2) of this subsection of the RCSA are being used to demonstrate compliance with the financial test requirements. Fill in the information for Alternative II if the criteria of subdivision (3) of this subsection of the RCSA are being used to demonstrate compliance with the financial test requirements.}

Alternative I

1.	Amount of annual UST aggregate coverage being assured by a financial test, and/or guarantee	$	
2.	Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee	$	
3.	Sum of lines 1 and 2	$	
4.	Total tangible assets	$	
5.	Total liabilities {if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6}	$	
6.	Tangible net worth {subtract line 5 from line 4}	$	
		Yes	**No**
7.	Is line 6 at least $[10]<u>20</u> million?	[$]	
8.	Is line 6 at least 10 times line 3?	[$]	
9.	Have financial statements for the latest fiscal year been filed with the Securities and Exchange Commission?	[$]	
10.	Have financial statements for the latest fiscal year been filed with the Energy Information Administration	[$]	
11.	Have financial statements for the latest fiscal year been filed with the Rural [Electrification Administration] <u>Utilities Service</u>?	[$]	
12.	Has financial information been provided to Dun and Bradstreet, and has Dun and Bradstreet provided a financial strength rating of [4A or 5A] <u>4A1, 4A2, 5A1 or 5A2</u>? {Answer “Yes” only if both criteria have been met.}	[$]	

Alternative II

1.	Amount of annual UST aggregate coverage being assured by a test, and/or guarantee	$
2.	Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee	$
3.	Sum of lines 1 and 2	$
4.	Total tangible assets	$
5.	Total liabilities {if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6}	$
6.	Tangible net worth {subtract line 5 from line 4}	$

7.	Total assets in the U.S. {required only if less than 90 percent of assets are located in the U.S.}	$	
		Yes	**No**
8.	Is line 6 at least $[10]20 million?	[$]	
9.	Is line 6 at least 6 times line 3?	[$]	
10.	Are at least 90 percent of assets located in the U.S.? {If "No," complete line 11[.]}	[$]	
11.	Is line 7 at least 6 times line 3? {Fill in either lines 12-15 or lines 16-18[:]}	[$]	
12.	Current assets	$	
13.	Current liabilities	$	
14.	Net working capital {subtract line 13 from line 12}	$	
		Yes	**No**
15.	Is line 14 at least 6 times line 3?	[$]	
16.	Current bond rating of most recent bond issue	[$]	
17.	Name of rating service	[$]	
18.	Date of maturity of bond	[$]	
19.	Have financial statements for the latest fiscal year been filed with the SEC, the Energy Information Administration, or the Rural [Electrification Administration] Utilities Service?	[$]	

{If "No," please attach a report from an independent certified public accountant certifying that there are no material differences between the data as reported in lines 4-18 above and the financial statements for the latest fiscal year.}

{For both Alternative I and Alternative II complete the certification with this statement.}

I hereby certify that the wording of this letter is identical to the wording specified in subdivision [22a-449(d)-109 (f)](4) of [these regulations] this subsection as such regulations were constituted on the date shown immediately below.

{Signature}

{Name}

{Title}

{Date}

(5) If an owner or operator using the financial test to provide financial assurance finds that he or she no longer meets the requirements of the financial test based on the year-end financial statements, the owner or

operator shall obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.

(6) The [Director of the implementing agency] commissioner may require reports of financial condition at any time from the owner, [or] operator[, and/or] or guarantor. If the [Director] commissioner finds, on the basis of such reports or other information, that the owner, [or] operator[, and/or] or guarantor, no longer meets the financial test requirements of subdivisions [22a-449(d)-109 (f)] (2) or (3) and (4) of [these regulations] this subsection, the owner or operator shall obtain alternate coverage within 30 days after notification of such a finding.

(7) If the owner, [or] operator or guarantor fails to obtain alternate assurance within 150 days of finding that he or she no longer meets the requirements of the financial test based on the year-end financial statements, or within 30 days of notification by the [Director of the implementing agency] commissioner that he or she no longer meets the requirements of the financial test, the owner, [or] operator or guarantor shall notify the commissioner of such failure within 10 days.

(8) An owner, operator or guarantor may only use Alternative II in the Letter from the Chief Financial Officer if such owner, operator or guarantor has a current investment grade bond rating for the most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's.

(f) **Guarantee.**

(1) An owner or operator may satisfy the requirements of subsection [22a-449(d)-109 (d)] (c) of [these regulations] this section by obtaining a guarantee that conforms to the requirements of [section 22a-449(d)-109 (g) of these regulations] this subsection. The guarantor shall be:

(A) A firm that:

(i) possesses a controlling interest in the owner or operator;

(ii) possesses a controlling interest in a firm described under [subparagraph 22a-449(d)-109 (g) (1) (A) (i) of these regulations] clause (i) of this subparagraph; or,

(iii) is controlled through stock ownership by a common parent firm that possesses a controlling interest in the owner or operator; or,

(B) A firm engaged in a substantial business relationship with the owner or operator and issuing the guarantee as an act incident to that business relationship.

(2) Within 120 days of the close of each financial reporting year the guarantor shall demonstrate that it meets the financial test criteria of subsection [22a-449(d)-109 (f) of these regulations] (e) of this section based on year-end financial statements for the latest completed financial reporting year by completing the letter from the chief financial officer described in subdivision [22a-449(d)-109 (f)] (4) of [these regulations] subsection (e) of this section and shall deliver the letter to the owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within 120 days of the end of the financial reporting year the guarantor shall send by certified mail or other trackable mail service approved by the commissioner, before cancellation or nonrenewal of the guarantee, notice to the owner or operator and the commissioner. If the [Director of the implementing agency] commissioner notifies the guarantor that he no longer meets the requirements of the financial test of subdivisions [22a-449(d)-109 (f)] (2) or (3) and (4) of [these regulations] subsection (e) of this section, the guarantor shall notify the owner or operator within 10 days of receiving such notification from the [Director] commissioner. In both cases, the guarantee shall terminate [no]not less than 120 days after the date the owner or operator and the commissioner receives the notification, whichever is later, as evidenced by the return [receipt]receipts. The owner or operator shall obtain alternative coverage as specified in subdivision [22a-449(d)-109 (u) (3) of these regulations] (5) of subsection (u) of this section.

(3) The guarantee shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

GUARANTEE

Guarantee made this {date} by {name of guaranteeing entity}, a business entity organized under the laws of the state of {name of state}, herein referred to as guarantor, to {the [state implementing agency] State of Connecticut's Commissioner of Energy and Environmental Protection} and to any and all third parties, and obligees, on behalf of {owner or operator} of {business address}.

Recitals

(1) Guarantor meets or exceeds the financial test criteria of [subdivisions 22a-449(d)-109 (f)]subsections (e) (2) or (3) and (4) of [these regulations] the Regulations of Connecticut State Agencies ("RCSA") and agrees to comply with the requirements for guarantors as specified in [subdivisions 22a-449(d)-109(g)] subsection (f)(2) of [these regulations] the RCSA.

(2) {Owner or operator} owns or operates the following underground storage tank(s) ("UST(s)") covered by this guarantee: {List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to [subsection] section 22a-449(d)-102[ ](b) of [these regulations] the RCSA or the corresponding state requirement, and the name and address of the facility.} This guarantee satisfies the requirements of section 22a-449(d)-109 of [these regulations] the RCSA for assuring funding for {insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location} arising from operating the above-identified [underground storage tank(s)] UST(s) in the amount of {insert dollar amount} per occurrence and {insert dollar amount} annual aggregate.

(3) {Insert appropriate phrase: "On behalf of our subsidiary" (if guarantor is corporate parent of the owner or operator); "On behalf of our affiliate" (if guarantor is a related firm of the owner or operator); or "Incident to our business relationship with" (if guarantor is providing the guarantee as an incident to a substantial business relationship with owner or operator)} {owner or operator}, guarantor guarantees to {[implementing agency] the State of Connecticut's Commissioner of Energy and Environmental Protection} and to any and all third parties that:

In the event that {owner or operator} fails to provide alternative coverage within [60] 30 days after receipt of a notice of cancellation of this guarantee and the [{Director of the Implementing Agency}] Commissioner has determined or suspects that a release has occurred at an [underground storage tank] UST covered by this guarantee, the guarantor, upon instructions from the [{Director}] Commissioner, shall fund a standby trust fund in accordance with the provisions of [subsection] section 22a-449(d)-109(s) of [these regulations] the RCSA, in an amount not to exceed the coverage limits specified above.

In the event that the [{Director}] Commissioner determines that {owner or operator} has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with section 22a-449(d)-106 of [these regulations] the RCSA, the guarantor upon written instructions from the [{Director}] Commissioner shall fund a standby trust in accordance with the provisions of [subsection] section 22a-449(d)-109[ ](s) of [these regulations] the RCSA in an amount not to exceed the coverage limits specified above.

If {owner or operator} fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by {"sudden" and/or "nonsudden"} accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the [{Director}] Commissioner, shall fund a standby trust in accordance with the provisions of [subsection]section 22a-449(d)-109(s) of [these regulations] the RCSA to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

(4) Guarantor agrees that if, at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet the financial test criteria of [subdivisions] sections 22a-449(d)-109[(e)] (f)(2) or (3) and (4) of [these regulations] the RCSA, guarantor shall send within 120 days of such failure, by certified mail or other trackable mail service approved by the Commissioner, notice to {owner or operator} and the Commissioner. The guarantee shall terminate 120 days from the date of receipt of the notice by {owner or operator} and the Commissioner, whichever is later, as evidenced by the return [receipt] receipts.

(5) Guarantor agrees to notify {owner or operator} by certified mail or other trackable mail service approved by the Commissioner of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within 10 days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of {owner or operator} to sections 22a-449(d)[ ]-101 to [109]114, inclusive, of [these regulations] the RCSA.

(7) Guarantor agrees to remain bound under this guarantee for so long as {owner or operator} shall comply with the applicable financial responsibility requirements of this section [22a-449-109 of these regulations] for the above-identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail or other trackable mail service approved by the Commissioner to {owner or operator} and the Commissioner, such cancellation to become effective no earlier than 120 days after receipt of such notice by {owner or operator} and the Commissioner, whichever is later, as evidenced by the return [receipt] receipts.

(8) The guarantor's obligation does not apply to any of the following:
(a) Any obligation of {insert owner or operator} under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
(b) Bodily injury to an employee of {insert owner or operator} arising from, and in the course of, employment by {insert owner or operator};

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
(d) Property damage to any property owned, rented, [loaded] loaned to, in the care, custody, or control of, or occupied by {insert owner or operator} that is not the direct result of a release from a petroleum [underground storage tank] UST;
(e) Bodily damage or property damage for which {insert owner or operator} is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of [subsection] section 22a-449(d)-109[(d)](c) of [these regulations] the RCSA.

(9) Guarantor expressly waives notice of acceptance of this guarantee by [{the implementing agency}] the Commissioner, by any or all third parties, or by {owner or operator}.

I hereby certify that the wording of this guarantee is identical to the wording specified in [subdivision] section 22a-449(d)-109[(g)](f)(3) of [these regulations] the RCSA as such regulations were constituted on {insert effective date} shown immediately below.

Effective date:
{Name of guarantor}
{Authorized signature for guarantor}
{Name of person signing}
{Title of person signing}
Signature of witness or notary:

(4) An owner or operator who uses a guarantee to satisfy the requirements of subsection [22a-449(d)-109 (d) of these regulation] (c) of this section shall establish a standby trust fund when the guarantee is obtained. Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee shall be deposited directly into the standby trust fund in accordance with instructions from the [Director of the implementing agency] commissioner under subsection [22a-449(d)-109 (s) of these regulations] (s) of this section. This standby trust fund shall meet the requirements specified in subsection [22a-449(d)-109 (n) of these regulations] (k) of this section.

[(h)] (g) **Insurance and risk retention group coverage.**

(1) An owner or operator may satisfy the requirements of subsection [22a-449(d)-109 (d) of these regulations] (c) of this section by obtaining liability insurance that conforms to the requirements of this section from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.
(2) Each insurance policy shall be amended by an endorsement worded as specified in subdivision [22a-449(d)-109 (h)] (2)[ ](A) of this subsection, or evidenced by a certificate of insurance worded as specified in subdivision (2)(B) of [these regulations] this subsection, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted:

(A) Endorsement

Name: {name of each covered location}

_____

_____

Address: {address of each covered location}

_____

_____

Policy Number:_____
Period of Coverage: {current policy period}

_____

_____

Name of {Insurer or Risk Retention Group}:

_____

_____

Address of {Insurer or Risk Retention Group}:

_____

_____

Name of Insured:_____
Address of Insured:

_____

_____

ENDORSEMENT:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following underground storage tanks (“USTs”):

   {List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to [subsection 22a-449(d)-102 (b) of these regulations, or the corresponding state requirement] section 22a-449(d)-114 of the Regulations of Connecticut State Agencies (“RCSA”), and the name and address of the facility} for {insert: ″taking corrective action″ and/or ″compensating third parties for bodily injury and property damage caused by″ either ″sudden accidental releases″ or ″nonsudden accidental releases″ or ″accidental releases″; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location} arising from operating the [underground storage tank(s)] UST(s) identified above.

   The limits of liability are {insert the dollar amount of the ″each occurrence″ and ″annual aggregate″ limits of the Insurer’s or Group’s liability; if the amount of coverage is different for different types of coverage or for different USTs or locations, indicate the amount of coverage for each type of coverage and/or for each UST or location}, exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under {policy number}. The effective date of said policy is {date}.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) to (e), inclusive, of this Paragraph 2 are hereby amended to conform with subsections (a) to (e), inclusive;

   a. Bankruptcy or insolvency of the insured shall not relieve the {″Insurer″ or ″Group″} of its obligations under the policy to which this endorsement is attached.

   b. The {″Insurer″ or ″Group″} is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement

by the insured for any such payment made by the {″Insurer″ or ″Group″}. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in subsections 22a-449(d)-109[(f) to (m), inclusive, of these regulations](e) to (j), inclusive, of the RCSA, as applicable.

c. Whenever requested by [{a Director of an implementing agency}] the Commissioner of Energy and Environmental Protection, the {″Insurer″ or ″Group″} agrees to furnish to [{the Director}] the Commissioner a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the {″Insurer″ or ″Group″}, except for non-payment of premium or misrepresentation by the insured, shall be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured and the Commissioner. Cancellation for non-payment of premium or misrepresentation by the insured shall be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured and the Commissioner.

{Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the {″Insurer″ or ″Group″} within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.}

I hereby certify that the wording of this instrument is identical to the wording in [subdivision 22a-449(d)-109 (h) (2) (A) of these regulations] section 22a-449(d)-109(g)(2)(A) of the RCSA and that the {″Insurer″ or ″Group″} is {″licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states″}.

{Signature of authorized representative of Insurer or Risk Retention Group}

{Name of person signing}

{Title of person signing}, Authorized Representative of {name of Insurer or Risk Retention Group}

{Address of Representative}

(B) Certificate of Insurance
Name: {name of each covered location}

_____

_____

Address: {address of each covered location}

_____

_____

Policy Number:_____
Endorsement (if applicable):_____
Period of Coverage: {current policy period}

_____
Name of {Insurer or Risk Retention Group}:

_____

_____
Address of {Insurer or Risk Retention Group}:

_____

_____
Name of Insured:_____
Address of Insured:

_____

_____
Certification:

1. {Name of Insurer or Risk Retention Group}, {the ″Insurer″ or ″Group″}, as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s) (“UST(s)”):

{List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to [subsection 22a-449 (d)-102 (b) of these regulations, or the corresponding state requirement] section 22a-449(d)-114 of the Regulations of Connecticut State Agencies (“RCSA”), and the name and address of the facility}for {insert: ″taking corrective action″ and/or ″compensating third parties for bodily injury and property damage caused by″ either ″sudden accidental releases″ or ″nonsudden accidental releases″ or ″accidental releases″; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location} arising from operating the [underground storage tank(s)] UST(s) identified above.

The limits of liability are {insert the dollar amount of the ″each occurrence″ and ″annual aggregate″ limits of the Insurer’s or Group’s liability; if the amount of coverage is different for different types of coverage or for different [underground storage tank(s)] USTs or locations, indicate the amount of coverage for each type of coverage and/or for each [underground storage tank] UST or location}, exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under {policy number}. The effective date of said policy is {date}.

2. The {″Insurer″ or ″Group″} further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the {″Insurer″ or ″Group″} of its obligations under the policy to which this certificate applies.

b. The {″Insurer″ or ″Group″} is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the {″Insurer″ or ″Group″}. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or

combination of mechanisms as specified in subsections 22a-449(d)-109[(f) to (m), inclusive, of these regulations] (e) to (j), inclusive, of the RCSA.

c. Whenever requested by [{a Director of an implementing agency}] the Commissioner of Energy and Environmental Protection, the {″Insurer″ or ″Group″} agrees to furnish to the Commissioner a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the {″Insurer″ or ″Group″}, except for non-payment of premium or misrepresentation by the insured, shall be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured and the Commissioner. Cancellation for non-payment of premium or misrepresentation by the insured shall be effective only upon written notice and only after expiration of a minimum of 10 days after a copy of such written notice is received by the insured and the Commissioner.

{Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the {″Insurer″ or ″Group″} within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.}

I hereby certify that the wording of this instrument is identical to the wording in [subdivision 22a-449(d)-109 (h) (2) (B) of these regulations] section 22a-449(d)-109(g)(2)(B) of the RCSA and that the {″Insurer″ or ″Group″} is {″licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states″}. I further certify that the policy conforms in all respects with the requirements in section 22a-449(d)-109(g) of the RCSA, and any inconsistencies with such regulations are hereby amended to eliminate such inconsistencies.

{Signature of authorized representative of Insurer}

{Type name}

{Title}, Authorized Representative of {name of Insurer or Risk Retention Group}

{Address of Representative}

(3) Each insurance policy shall be issued by an insurer or a risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

[(i)] (h) **Surety bond.**

(1) An owner or operator may satisfy the requirements of subsection [22a-449(d)-109 (d) of these regulations] (c) of this section by obtaining a surety bond that conforms to the requirements of this section. The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the latest Circular 570 of the U.S. Department of the Treasury.

(2) The surety bond shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted:

PERFORMANCE BOND
Date bond executed:_____
Period of coverage:_____
Principal: {legal name and business address of owner or operator}
_____
Type of organization: {insert ″individual,″ ″joint venture,″ ″partnership,″ or ″corporation″}
_____
State of incorporation (if applicable):
_____
Surety(ies): {name(s) and business address(es)}
_____
Scope of Coverage: {List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to [subsection 22a-449(d)-102 (b) of these regulations] section 22a-449(d)-114 of the Regulations of Connecticut State Agencies (“RCSA”), or the corresponding state requirement, and the name and address of the facility. List the coverage guaranteed by the bond: ″taking corrective action″ and/or ″compensating third parties for bodily injury and property damage caused by″ either ″sudden accidental releases″ or ″nonsudden accidental releases″ or ″accidental releases″ ″arising from operating the UST″}.

Penal sums of bond:

Per occurrence $_____

Annual aggregate $_____

Surety’s bond number:_____

Know All Persons by These Presents, that we, the Principal and Surety(ies), hereto are firmly bound to [{the implementing agency}] the Commissioner of Energy and Environmental Protection, in the above penal sums for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sums jointly and severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sums.

Whereas said Principal is required under [Subtitle I of the Resource Conservation and Recovery Act (RCRA), as amended] section 22a-449(d)-109 of the RCSA, to provide financial assurance for {insert: ″taking corrective action″ and/or ″compensating third parties for bodily injury and property damage caused by″ either ″sudden accidental releases″ or ″nonsudden accidental releases″ or ″accidental releases″; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location} arising from operating the underground storage tanks identified above, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of the obligation are such that if the Principal shall faithfully [″take corrective action, in accordance with section 22a-449(d)-106 of [these regulations and the Director of the state implementing agency's] the RCSA and the Commissioner's instructions for,″ and/or ″compensate injured third parties for bodily injury and property damage caused by″ either "sudden" or "nonsudden" or "sudden and nonsudden"] accidental releases arising from operating the tank(s) identified above, or if the Principal shall provide alternate financial assurance, as specified in section [22a-449 (d)-109 of these regulations] 22a-449(d)-109(p) of the RCSA, 120 days after the date the notice of cancellation is received by the Principal from the Surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

Such obligation does not apply to any of the following:

(a) Any obligation of {insert owner or operator} under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
(b) Bodily injury to an employee of {insert owner or operator} arising from, and in the course of, employment by {insert owner or operator};
(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by {insert owner or operator} that is not the direct result of a release from a petroleum underground storage tank;
(e) Bodily injury or property damage for which {insert owner or operator} is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of [subsection 22a-449(d)-109 (d) of these regulations] section 22a-449(d)-109(c) of the RCSA.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by [{the Director of the Implementing Agency}] the Commissioner that the Principal has failed to {″take corrective action, in accordance with section 22a-449(d)-106 of [these regulations] the RCSA and the [Director's] Commissioner's instructions,″ and/or ″compensate injured third parties″} as guaranteed by this bond, the Surety(ies) shall either perform {″corrective action in accordance with sections 22a-449(d)-101 to [113]114, inclusive, of [these regulations] the RCSA and the [Director's] Commissioner's instructions,″ and/or ″third-party liability compensation″} or place funds in an amount up

to the annual aggregate penal sum into the standby trust fund as directed by [{the Director of the Implementing Agency}] the Commissioner under [subsections]section 22a-449(d)-109(s) of [these regulations] the RCSA.

Upon notification by [{the Director}] the Commissioner that the Principal has failed to provide alternate financial assurance within 60 days after the date the notice of cancellation is received by the Principal and the Commissioner, whichever is later, from the Surety(ies) and that [{the director}] the Commissioner has determined or suspects that a release has occurred, the Surety(ies) shall place funds in an amount not exceeding the annual aggregate penal sum into the standby trust fund as directed by [{the Director}] the Commissioner under [subsection] section 22a-449(d)-109(s) of [these regulations] the RCSA.

The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the annual aggregate to the penal sum shown on the face of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail or other trackable mail service approved by the Commissioner to the Principal and the Commissioner in accordance with section 22a-449(d)-109(p) of the RCSA, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal and the Commissioner, whichever is later, as evidenced by the return [receipt] receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies).

In Witness Thereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in [subdivision 22a-449(d)-109 (i) (2) of these regulations] section 22a-449(d)-109(h)(2) of the RCSA as such regulations were constituted on the date this bond was executed.

Principal
{Signature(s)} _____

{Names(s)} _____

{Title(s)} _____

{Corporate seal}

Corporate Surety(ies)

{Name and address}_____

{State of Incorporation}_____

{Liability limit}: $_____

{Signature(s)} _____

{Names(s) and title(s)} _____

{Corporate seal}

{For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.}

Bond premium: $_____

(3) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate penal sums.

(4) The owner or operator who uses a surety bond to satisfy the requirements of subsection 22a-449(d)-109[(d) of these regulations] (c) of this section shall establish a standby trust fund when the surety bond is acquired. Under the terms of the bond, all amounts paid by the surety under the bond shall be deposited directly into the standby trust fund in accordance with instructions from the [Director] commissioner under subsection [22a-449(d)-109 (s) of these regulations] (s) of this section. This standby trust fund shall meet the requirements specified in subsection [22a-449(d)-109(k) of these regulations](n) of this section.

[(j)](i) **Letter of credit.**

(1) An owner or operator may satisfy the requirements of subsection [22a-449(d)-109(d) of these regulations](c) of this section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this section. The issuing institution shall be an entity that has the authority to issue letters of credit in each state where used and whose letter-of-credit operations are regulated and examined by a federal or state agency.

(2) The letter of credit shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

IRREVOCABLE STANDBY LETTER OF CREDIT

{Name and address of issuing institution}

{Name and address of the [Director(s) of state implementing agency(ies)] Commissioner of Energy and

Environmental Protection}

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. -- in your favor, at the request and for the account of {owner or operator name} of {address} up to the aggregate amount of {in words} U.S. dollars ($ {insert dollar amount}), available upon presentation [{insert, if more than one Director of a state implementing agency is a beneficiary,] ″by any one of you″} of

(1) your sight draft, bearing reference to this letter of credit, No. -- , and
(2) your signed statement reading as follows: ″I certify that the amount of the draft is payable pursuant to regulations issued under authority of [Subtitle I of the Resource Conservation and Recovery Act of 1976, as amended] section 22a-449(d) of the Connecticut General Statutes.″

This letter of credit may be drawn on to cover {insert: ″taking corrective action″ and/or ″compensating third parties for bodily injury and property damage caused by″ either ″sudden accidental releases″ or ″nonsudden accidental releases″ or ″accidental releases″} arising from operating the underground storage tank(s) identified below in the amount of {in words} ${insert dollar amount} per occurrence and {in words} ${insert dollar amount} annual aggregate:

{List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subsection [22a-449 (d)-102 (b) of these regulations] 22a-449(d)-114 of the Regulation of Connecticut State Agencies (“RCSA”), or the corresponding state requirement, and the name and address of the facility.}

The letter of credit may not be drawn on to cover any of the following:

(a) Any obligation of {insert owner or operator} under workers compensation, disability benefits, or unemployment compensation law or other similar law;
(b) Bodily injury to an employee of {insert owner or operator} arising from, and in the course of, employment by {insert owner or operator};
(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by {insert owner or operator} that is not the direct result of a release from a petroleum underground storage tank;
(e) Bodily injury or property damage for which {insert owner or operator} is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of subsection 22a-449(d)-109[(c) of these regulations] (d) of the RCSA.

This letter of credit is effective as of {date} and shall expire on {date}, but such expiration date shall be automatically extended for a period of {at least the length of the original term} on {expiration date} and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify {owner or operator} and the Commissioner by certified mail or other trackable mail service approved by the

Commissioner that we have decided not to extend this letter of credit beyond the current expiration date. In the event that {owner or operator} and Commissioner [is] are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by {owner or operator} and the Commissioner, whichever is later, as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of {owner or operator} in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in [subdivision 22a-449(d)-109 (j) (2) of these regulations] section 22a-449(d)-109(i)(2) of the RCSA as such regulations were constituted on the date shown immediately below.

{Signature(s) and title(s) of official(s) of issuing institution}
{Date}

This credit is subject to {insert ″the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce,″ or ″the Uniform Commercial Code″}.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of subsection [22a-449(d)-109 (d) of these regulations] (c) the this section shall also establish a standby trust fund when the letter of credit is acquired. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the [Director of the Implementing Agency] commissioner shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the [Director] commissioner under subsection [22a-449(d)-109 (s) of these regulations] (s) of this section. This standby trust fund shall meet the requirements specified in subsection [22a-449(d)-109 (n)of these regulations] (k) of this section.

(4) The letter of credit shall be irrevocable with a term specified by the issuing institution. The letter of credit shall provide that credit be automatically renewed for the same term as the original term, unless, at least 120 days before the current expiration date, the issuing institution notifies the owner or operator and the commissioner by certified mail or other trackable mail service approved by the commissioner of its decision not to renew the letter of credit. Under the terms of the letter of credit, the 120 days shall begin on the date when the owner or operator and the commissioner [receives] receive the notice, whichever is later, as evidenced by the return [receipt] receipts.

[(k) **Use of state-required mechanism.**

(1) For underground storage tanks located in a state that does not have an approved program, and where the state requires owners or operators of underground storage tanks to demonstrate financial responsibility for taking corrective action and/or for compensating third parties for bodily injury and property damage, an owner or operator may use a state-required financial mechanism to meet the requirements of subsection 22a-449(d)-109 (d) of these regulations if the Director of the Implementing Agency determines that the state mechanism is at least equivalent to the financial mechanisms specified in this section.

(2) The Director of the Implementing Agency shall evaluate the equivalency of a state-required mechanism principally in terms of: certainty of the availability of funds for taking corrective action and/or for compensating third parties; the amount of funds that shall be made available; and the types of costs covered. The Director of the Implementing Agency may also consider other factors as is necessary.

(3) The state, an owner or operator, or any other interested party may submit to the Director of the Implementing Agency, a written petition requesting that one or more of the state-required mechanisms be considered acceptable for meeting the requirements of subsection 22a-449(d)-109 (d) of these regulations. The submission shall include copies of the appropriate state statutory and regulatory requirements and shall show the amount of funds for corrective action and/or for compensating third parties assured by the mechanism(s). The Director of the Implementing Agency may require the petitioner to submit additional information as is deemed necessary to make this determination.

(4) Any petition under this section may be submitted on behalf of all of the state's underground storage tank owners and operators.

(5) The Director of the Implementing Agency shall notify the petitioner of his determination regarding the mechanism's acceptability in lieu of financial mechanisms specified in this section. Pending this determination, the owners and operators using such mechanisms shall be deemed to be in compliance with the requirements of subsection 22a-449(d)-109 (d) of these regulations for underground storage tanks located in the state for the amounts and types of costs covered by such mechanisms.

(l) **State fund or other state assurance.**

(1) An owner or operator may satisfy the requirements of subsection 22a-449(d)-109 (d) of these regulations for underground storage tanks located in Connecticut, where the Connecticut Department of Environmental Protection is administering the requirements of section 22a-449(d)-109 of these regulations, which assures that monies shall be available from a state fund or state assurance program to cover costs up to the limits specified in subsection 22a-449(d)-109 (d) of these regulations or otherwise assures that such costs shall be paid if the Director of the Implementing Agency determines that the state's assurance is at least equivalent to the financial mechanisms specified in section 22a-449(d)-109 of these regulations.

(2) The Director of the Implementing Agency shall evaluate the equivalency of a state fund or other state assurance principally in terms of: Certainty of the availability of funds for taking corrective action and/or for compensating third parties; the amount of funds that shall be made available; and the types of costs covered. The Director of the Implementing Agency may also consider other factors as is necessary.

(3) The state shall submit to the Director of the Implementing Agency, a description of the state fund or other state assurance to be supplied as financial assurance, along with a list of the classes of underground storage tanks to which the funds may be applied. The Director of the Implementing Agency may require the

state to submit additional information as is deemed necessary to make a determination regarding the acceptability of the state fund or other state assurance. Pending the determination by the Director of the Implementing Agency, the owner or operator of a covered class of USTs shall be deemed to be in compliance with the requirements of subsection 22a-449 (d)-109 (d) of these regulations for the amounts and types of costs covered by the state fund or other state assurance.

(4) The Director of the Implementing Agency shall notify the state of his determination regarding the acceptability of the state's fund or other assurance in lieu of financial mechanisms specified in section 22a-449 (d)-109 of these regulations. Within 60 days after the Director of the Implementing Agency notifies a state that a state fund or other state assurance is acceptable, the state shall provide to each owner or operator for which it is assuming financial responsibility a letter or certificate describing the nature of the state's assumption of responsibility. The letter or certificate from the state shall include, or have attached to it, the following information: the facility's name and address and the amount of funds for corrective action and/or for compensating third parties that is assured by the state. The owner or operator shall maintain this letter or certificate on file as proof of financial responsibility in accordance with subdivision 22a-449(d)-109 (r) (2) (E) of these regulations.]

[(m)] (j) **Trust fund.**

(1) An owner or operator may satisfy the requirements of subsection [22a-449(d)-109 (d) of these regulations] (c) of this section by establishing a trust fund that conforms to the requirements of this section. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2) The wording of the trust agreement shall be identical to the wording specified in subdivision [22a-449(d)-109 (n) (2) (A) of these regulations] (2)(A) of subsection (k) of this section, and shall be accompanied by a formal certification of acknowledgement as specified in subdivision [22a-449(d)-109 (n) (2) (B) of these regulations] (2)(B) of subsection (k) of this section.

(3) The trust fund, when established, shall be funded for the full required amount of coverage, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining required coverage.

(4) If the value of the trust fund is greater than the required amount of coverage, the owner or operator may submit a written request to the [Director of the implementing agency] commissioner for release of the excess.

(5) If other financial assurance as specified in this section [22a-449(d)-109] is substituted for all or part of the trust fund, the owner or operator may submit a written request to the commissioner for release of the excess.

(6) Within 60 days after receiving a request satisfactory to the commissioner from the owner or operator for release of funds as specified in subdivisions [22a-449(d)-109 (m)] (4) or (5) of [these regulations]

this subsection, the [Director of the implementing agency] commissioner shall instruct the trustee to release to the owner or operator such funds as the [Director] commissioner specifies in writing.

[(n)] (k) **Standby trust fund.**

(1) An owner or operator using any one of the mechanisms authorized by subsections [22a-449(d)-109 (g), (i) or (j) of these regulations] (f), (h) or (i) of this section shall establish a standby trust fund when the mechanism is acquired. The trustee of the standby trust fund shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal agency or an agency of the state in which the fund is established.

(2) (A) The standby trust agreement, or trust agreement, shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

TRUST AGREEMENT

Trust agreement, the ″Agreement,″ entered into as of {date} by and between {name of the owner or operator}, a {name of state} {insert ″corporation,″ ″partnership,″ ″association,″ or ″proprietorship″}, the ″Grantor,″ and {name of corporate trustee}, {insert ″Incorporated in the state of _____ ″ or ″a national bank″}, the ″Trustee.″

Whereas, the [United States Environmental Protection Agency, “EPA,” an agency of the United States Government,] Connecticut Department of Energy and Environmental Protection, “DEEP”, has established certain regulations applicable to the Grantor, requiring that an owner or operator of an underground storage tank (“UST”) shall provide assurance that funds shall be available when needed for corrective action and third-party compensation for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from the operation of the [underground storage tank] UST. The attached Schedule A lists the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located that are covered by the [standpoint] {insert “standby” where trust agreement is standby trust agreement} trust agreement.

{Whereas, the Grantor has elected to establish {insert either ″a guarantee,″ ″surety bond,″ or ″letter of credit″} to provide all or part of such financial assurance for the [underground storage tanks] UST(s) identified herein and is required to establish a standby trust fund able to accept payments from the instrument (This paragraph is only applicable to the standby trust agreement.)};

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee;

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions

As used in this Agreement:

(a)The term ″Grantor″ means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term ″Trustee″ means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of the Financial Assurance Mechanism

This Agreement pertains to the {[[]identify the financial assurance mechanism, either a guarantee, surety bond, or letter of credit, from which the standby trust fund is established to receive payments (This paragraph is only applicable to the standby trust agreement.)}[]].

Section 3. Establishment of Fund

The Grantor and the Trustee hereby establish a trust fund, the ″Fund,″ for the benefit of [{implementing agency}] the Commissioner of Energy and Environmental Protection. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. {The Fund is established initially as a standby to receive payments and shall not consist of any property.} Payments made by the provider of financial assurance pursuant to [{the Director of implementing agency's}] Commissioner's instruction are transferred to the Trustee and are referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement.

The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor as provider of financial assurance, any payments necessary to discharge any liability of the Grantor established by [{the implementing agency}] the Commissioner.

Section 4. Payment for {″Corrective Action″ and/or ″Third-Party Liability Claims″}

The Trustee shall make payments from the Fund as [{the Director of the implementing agency}] the Commissioner shall direct, in writing, to provide for the payment of the costs of {insert: ″taking corrective action″ and/or compensating third parties for bodily injury and property damage caused by either ″sudden accidental releases″ or ″nonsudden accidental releases″ or ″accidental releases″} arising from operating the tanks covered by the financial assurance mechanism identified in this Agreement.

The Fund may not be drawn upon to cover any of the following:

(a) Any obligation of {insert owner or operator} under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of {insert owner or operator} arising from, and in the course of employment by {insert owner or operator};

(c) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by {insert owner or operator} that is not the direct result of a release from a petroleum [underground storage tank] UST;

(e) Bodily injury or property damage for which {insert owner or operator} is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of subsection 22a-449(d)-109[(d) of these regulations] (c) of the Regulations of Connecticut State Agencies ("RCSA").

The Trustee shall reimburse the Grantor, or other persons as specified by [{the Director}] the Commissioner, from the Fund for corrective action expenditures and/or third-party liability claims in such amounts as [{the Director}] the Commissioner shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as [{the Director}] the Commissioner specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund

Payments made to the Trustee for the Fund shall consist of cash and securities acceptable to the Trustee.

Section 6. Trustee Management

The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiaries and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the federal or state government; and

(iii)The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment

The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee

Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses

All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Advice of Counsel

The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any questions arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee Compensation

The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. Successor Trustee

The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee’s acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent

jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the Grantor, the Commissioner and the present Trustee by certified mail or other trackable mail service approved by the Commissioner 10 days before such change becomes effective. The successor trustee shall certify in writing sent to the Grantor, the Commissioner and the present Trustee that the successor trustee is qualified to act as a trustee in accordance with section 22a-449(d)-109(k)(1) of the RCSA. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 13. Instructions to the Trustee

All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule B or such other designees as the Grantor may designate by amendment to Schedule B. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by [{the Director of the implementing agency}] the Commissioner to the Trustee shall be in writing, signed by [{the Director}] the Commissioner, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or [{the director}] the Commissioner hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or [{the Director}] the Commissioner, except as provided for herein.

Section 14. Amendment of Agreement

This Agreement may be amended by an instrument in writing executed by the Grantor and the Trustee, or by the Trustee and [{the Director of the implementing agency}] the Commissioner if the Grantor ceases to exist.

Section 15. Irrevocability and Termination

Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written direction of the Grantor and the Trustee, or by the Trustee and [{the Director of the implementing agency}] the Commissioner, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 16. Immunity and Indemnification

The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or [{the Director of the implementing agency}] the Commissioner issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 17. Choice of Law

This Agreement shall be administered, construed, and enforced according to the laws of the state of [{insert name of state}] Connecticut, or the Comptroller of the Currency in the case of National Association banks.

Section 18. Interpretation

As used in this Agreement, words in the singular include the plural and words in the plural include the singular.

The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals (if applicable) to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in subsection 22a-449(d)-109[(n) (2) (A) of these regulations] (k)(2)(A) of the RCSA as such regulations were constituted on the date written above.

{Signature of Grantor}

{Name of the Grantor}

{Title} Attest:

{Signature of Trustee}

{Name of the Trustee}

{Title}

{Seal} {Signature of Witness}

{Name of the Witness}

{Title}

{Seal}

(B) The standby trust agreement, or trust agreement shall be accompanied by a formal certification of acknowledgement similar to the following. State requirements may differ on the proper content of this acknowledgment.

State of_____

County of_____

On this {date}, before me personally came {owner or operator} to me known, who, being by me duly sworn, did depose and say that she/he resides at {address}, that she/he is {title} of {corporation}, the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that she/he signed her/his name thereto by like order.

{Signature of Notary Public}

{Name of Notary Public}

(3) The [Director of the implementing agency] commissioner shall instruct the trustee to refund the balance of the standby trust fund to the provider of financial assurance if the [Director] commissioner determines that

no additional corrective action costs or third-party liability claims shall occur as a result of a release covered by the financial assurance mechanism for which the standby trust fund was established.

(4) An owner or operator may establish one trust fund as the depository mechanism for all funds assured in compliance with this rule.

(l) **Local Government Bond Rating Test**

(1) A general purpose local government owner or operator or local government serving as a guarantor may satisfy the requirements of subsection (c) of this section by having a currently outstanding issue or issues of general obligation bonds of $1 million or more, excluding refunded obligations, with an investment grade Moody's bond rating of Aaa, Aa, A, or Baa, or an investment grade Standard & Poor's bond rating of AAA, AA, A, or BBB. Where a local government has multiple outstanding issues, or where a local government's bonds are rated by both Moody's and Standard and Poor's, the lowest rating shall be used to determine eligibility. Bonds that are backed by credit enhancement other than municipal bond insurance may not be considered in determining the amount of applicable bonds outstanding.

(2) A local government owner or operator or local government serving as a guarantor that is not a general-purpose local government and does not have the legal authority to issue general obligation bonds may satisfy the requirements of subsection (c) of this section by having a currently outstanding issue or issues of revenue bonds of $1 million or more, excluding refunded issues and by also having an investment grade Moody's bond rating of Aaa, A, A, or Baa, or an investment grade Standard & Poor's bond rating of AAA, AA, A, or BBB as the lowest rating for any rated revenue bond issued by the local government. Where bonds are rated by both Moody's and Standard & Poor's, the lower rating for each bond shall be used to determine eligibility. Bonds that are backed by credit enhancement may not be considered in determining the amount of applicable bonds outstanding.

(3) The local government owner or operator, or guarantor shall maintain a copy of its bond rating published within the last 12 months by Moody's or Standard & Poor's.

(4) To demonstrate that it meets the local government bond rating test, the chief financial officer of a general purpose local government owner or operator, or guarantor shall sign a letter worded exactly as follows, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted:

Letter from Chief Financial Officer

I am the chief financial officer of {insert: name and address of local government owner or operator, or guarantor}. This letter is in support of the use of the bond rating test to demonstrate financial responsibility for {insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"} caused by {insert: "sudden accidental releases", "nonsudden accidental releases" or "accidental releases"} in the amount of at least {insert: dollar amount} per occurrence and {insert: dollar amount} annual aggregate arising from operating (an) underground storage tank(s) ("UST(s)").

USTs at the following facilities are assured by this bond rating test: {List for each facility: the name and address of the facility where tanks are assured by the bond rating test}.

The details of the issue date, maturity, outstanding amount, bond rating, and bond rating agency of all outstanding bond issues that are being used by {name of local government owner or operator, or guarantor} to demonstrate financial responsibility are as follows: {complete table}

Issue date	Maturity date	Outstanding amount	Bond rating	Rating agency
-	-	-		{Moody's or Standard & Poor's}

The total outstanding obligation of {insert amount}, excluding refunded bond issues, exceeds the minimum amount of $1 million. All outstanding general obligation bonds issued by this government that have been rated by Moody's or Standard & Poor's are rated as at least investment grade (Moody's Baa or Standard & Poor's BBB) based on the most recent bond ratings published within the last twelve (12) months. Neither rating service has provided notification within the last twelve (12) months of downgrading of bond ratings below investment grade or of withdrawal of bond rating other than for repayment of outstanding bond issues.

I hereby certify that the wording of this letter is identical to the wording specified in section 22a-449(d)-109(l) of the Regulations of Connecticut State Agencies as such regulations were constituted on the date shown immediately below.

(Date)

(Signature)

(Name)

(Title)

(5) To demonstrate compliance with the local government bond rating test, the chief financial officer of local government owner or operator, or guarantor other than a general purpose government shall sign a letter worded exactly as follows, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted:

Letter from Chief Financial Officer

I am the chief financial officer of {insert: name and address of local government owner or operator, or guarantor}. This letter is in support of the use of the bond rating test to demonstrate financial responsibility for {insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"} caused by {insert: "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases"} in the amount of at least {insert: dollar amount} per occurrence and {insert: dollar amount} annual aggregate arising from operating (an) underground storage tank(s) ("UST(s)"). This local government is not organized to provide general governmental services and does not have the legal authority under state law or constitutional provisions to issue general obligation debt.

USTs at the following facilities are assured by this bond rating test: {List for each facility: the name and address of the facility where tanks are assured by the bond rating test}.

The details of the issue date, maturity, outstanding amount, bond rating, and bond rating agency of all outstanding revenue bond issues that are being used by {name of local government owner or operator, or guarantor} to demonstrate financial responsibility are as follows: {complete table}

Issue date	Maturity date	Outstanding amount	Bond rating	Rating agency
	-	-	-	{Moody's or Standard & Poor's}

The total outstanding obligation of {insert amount}, excluding refunded bond issues, exceeds the minimum amount of $1 million. All outstanding revenue bonds issued by this government that have been rated by Moody's or Standard & Poor's are rated as at least investment grade (Moody's Baa or Standard & Poor's BBB) based on the most recent bond ratings published within the last twelve (12) months. The revenue bonds listed are not backed by third-party credit enhancement or are insured by a municipal bond insurance company. Neither rating service has provided notification within the last twelve (12) months of downgrading of bond ratings below investment grade or of withdrawal of bond rating other than for repayment of outstanding bond issues.

I hereby certify that the wording of this letter is identical to the wording specified in section 22a-449(d)-109(l) of the Regulations of Connecticut State Agencies as such regulations were constituted on the date shown immediately below.

(Date)_____
(Signature)_____
(Name)_____
(Title)_____

(6) The commissioner may require reports of financial condition at any time from the local government owner, operator or local government guarantor. If the commissioner finds, on the basis of such reports or other information, that the local government owner or operator, or guarantor no longer meets the local government bond rating test requirements of this subsection, the local government owner or operator shall obtain alternative coverage within 30 days after notification of such a finding.

(7) If a local government owner or operator, or guarantor using the bond rating test to provide financial assurance finds that it no longer meets the bond rating test requirements, the local government owner or operator shall obtain alternative coverage within 150 days of the change in status.

(8) If the local government owner or operator fails to obtain alternate assurance within 150 days of finding that

it no longer meets the requirements of the bond rating test or within 30 days of notification by the commissioner that it no longer meets the requirements of the bond rating test, the owner or operator shall notify the commissioner of such failure within 10 days.

(m) **Local government financial test.**

(1) A local government owner or operator may satisfy the requirements of subsection (c) of this section by passing the financial test specified in this section. To be eligible to use the financial test, the local government owner or operator shall have the ability and authority to assess and levy taxes or to freely establish fees and charges. To pass the local government financial test, the owner or operator shall meet the criteria of subdivisions (2)(B) and (C) of this section based on year-end financial statements for the latest completed fiscal year.

(2)(A) The local government owner or operator shall have the following information available, as shown in the year-end financial statements for the latest completed fiscal year:

(i) Total revenues: Consists of the sum of general fund operating and non-operating revenues including net local taxes, licenses and permits, fines and forfeitures, revenues from use of money and property, charges for services, investment earnings, sales (property, publications, etc.), intergovernmental revenues (restricted and unrestricted), and total revenues from all other governmental funds including enterprise, debt service, capital projects, and special revenues, but excluding revenues to funds held in a trust or agency capacity. For purposes of this test, the calculation of total revenues shall exclude all transfers between funds under the direct control of the local government using the financial test (interfund transfers), liquidation of investments, and issuance of debt;

(ii) Total expenditures: Consists of the sum of general fund operating and non-operating expenditures including public safety, public utilities, transportation, public works, environmental protection, cultural and recreational, community development, revenue sharing, employee benefits and compensation, office management, planning and zoning, capital projects, interest payments on debt, payments for retirement of debt principal, and total expenditures from all other governmental funds including enterprise, debt service, capital projects, and special revenues. For purposes of this test, the calculation of total expenditures shall exclude all transfers between funds under the direct control of the local government using the financial test (interfund transfers);

(iii) Local revenues: Consists of total revenues (as defined in paragraph (2)(A)(i) of this section) minus the sum of all transfers from other governmental entities, including all monies received from Federal, state, or local government sources;

(iv) Debt service: Consists of the sum of all interest and principal payments on all long-term credit obligations and all interest-bearing short-term credit obligations. Includes interest and principal payments on general obligation bonds, revenue bonds, notes, mortgages, judgments, and interest bearing warrants. Excludes payments on non-interest-bearing short-term obligations, interfund obligations, amounts owed in a trust or agency capacity, and advances and contingent loans from other governments;

(v) Total funds: Consists of the sum of cash and investment securities from all funds, including general, enterprise, debt service, capital projects, and special revenue funds, but excluding employee retirement funds, at the end of the local government's financial reporting year. Includes Federal securities, Federal agency securities, state and local government securities, and other securities such as bonds, notes and mortgages. For purposes of this test, the calculation of total funds shall exclude agency funds, private trust funds, accounts receivable, value of real property, and other non-security assets; and

(vi) Population consists of the number of people in the area served by the local government.

(B) The local government's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion or a disclaimer of opinion. The local government cannot have outstanding issues of general obligation or revenue bonds that are rated as less than investment grade.

(C) The local government owner or operator shall have a letter signed by the chief financial officer worded as specified in subdivision (3) of this subsection.

(3) To demonstrate that it meets the financial test under subdivision (2) of this subsection, the chief financial officer of the local government owner or operator shall sign, within 120 days of the close of each financial reporting year, as defined by the twelve-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as follows, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted:

Letter From Chief Financial Officer

I am the chief financial officer of {insert: name and address of the owner or operator}. This letter is in support of the use of the local government financial test to demonstrate financial responsibility for {insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"} caused by {insert: "sudden accidental releases", "nonsudden accidental releases" or "accidental releases"} in the amount of at least {insert: dollar amount} per occurrence and {insert: dollar amount} annual aggregate arising from operating (an) underground storage tank(s) ("UST(s)").

USTs at the following facilities are assured by this financial test {List for each facility: the name and address of the facility where tanks assured by this financial test are located. If separate mechanisms or combinations of mechanisms are being used to assure any of the tanks at this facility, list each tank assured by this financial test by the tank identification number provided in the notification submitted pursuant to section 22a-449(d)-114 of the Regulations of Connecticut State Agencies ("RCSA").}

This owner or operator has not received an adverse opinion, or a disclaimer of opinion from an independent auditor on its financial statements for the latest completed fiscal year. Any outstanding issues of general obligation or revenue bonds, if rated, have a Moody's rating of Aaa, Aa, A, or Baa or a Standard and Poor's rating of AAA, AA, A, or BBB; if rated by both firms, the bonds have a Moody's rating of Aaa, Aa, A, or Baa and a Standard and Poor's rating of AAA, AA, A, or BBB.

Worksheet for Local Government Financial Test

Part I: Basic Information

1. Total Revenues

a. Revenues (dollars) _____
Value of revenues excludes liquidation of investments and issuance of debt. Value

includes all general fund operating and non-operating revenues, as well as all revenues from all other governmental funds including enterprise, debt service, capital projects, and special revenues, but excluding revenues to funds held in a trust or agency capacity.
b. Subtract interfund transfers (dollars)_____
c. Total Revenues (dollars)_____

2. Total Expenditures

a. Expenditures (dollars) _____
Value consists of the sum of general fund operating and non-operating expenditures including interest payments on debt, payments for retirement of debt principal, and total expenditures from all other governmental funds including enterprise, debt service, capital projects, and special revenues.
b. Subtract interfund transfers (dollars)_____
c. Total Expenditures (dollars)_____

3. Local Revenues

a. Total Revenues (from 1c) (dollars)_____
b. Subtract total intergovernmental transfers (dollars)_____
c. Local Revenues (dollars)_____

4. Debt Service

a. Interest and fiscal charges (dollars)_____
b. Add debt retirement (dollars)_____
c. Total Debt Service (dollars)_____

5. Total Funds (Dollars)_____

(Sum of amounts held as cash and investment securities from all funds, excluding amounts held for employee retirement funds, agency funds, and trust funds)

6. Population (Persons)_____

Part II: Application of Test

7. Total Revenues to Population

a. Total Revenues (from 1c)_____
b. Population (from 6)_____
c. Divide 7a by 7b _____
d. Subtract 417_____
e. Divide by 5,212_____
f. Multiply by 4.095_____

8. Total Expenses to Population

a. Total Expenses (from 2c)_____
b. Population (from 6)_____
c. Divide 8a by 8b _____
d. Subtract 524 _____
e. Divide by 5,401_____
f. Multiply by 4.095_____

9. Local Revenues to Total Revenues

a. Local Revenues (from 3c)_____
b. Total Revenues (from 1c)_____
c. Divide 9a by 9b _____
d. Subtract .695_____
e. Divide by .205 _____
f. Multiply by 2.840 _____

10. Debt Service to Population

a. Debt Service (from 4c) _____
b. Population (from 6)_____
c. Divide 10a by 10b _____
d. Subtract 51 _____
e. Divide by 1,038_____
f. Multiply by -1.866_____

11. Debt Service to Total Revenues

a. Debt Service (from 4c)_____
b. Total Revenues (from 1c)_____
c. Divide 11a by 11b _____
d. Subtract .068 _____
e. Divide by .259 _____
f. Multiply by -3.533 _____

12. Total Revenues to Total Expenses

a. Total Revenues (from 1c)_____
b. Total Expenses (from 2c)_____
c. Divide 12a by 12b_____
d. Subtract .910 _____
e. Divide by .899 _____
f. Multiply by 3.458 _____

13. Funds Balance to Total Revenues

a. Total Funds (from 5) _____
b. Total Revenues (from 1c)_____
c. Divide 13a by 13b _____
d. Subtract .891 _____
e. Divide by 9.156_____
f. Multiply by 3.270 _____

14. Funds Balance to Total Expenses

a. Total Funds (from 5)_____
b. Total Expenses (from 2c)_____
c. Divide 14a by 14b_____
d. Subtract .866 _____
e. Divide by 6.409 _____
f. Multiply by 3.270 _____

15. Total Funds to Population _____

a. Total Funds (from 5) _____
b. Population (from 6)_____
c. Divide 15a by 15b _____
d. Subtract 270 _____
e. Divide by 4,548 _____
f. Multiply by 1.866 _____

16. Add 7f + 8f + 9f + 10f + 11f + 12f + 13f + 14f + 15f + 4.937_____

I hereby certify that the financial index shown on line 16 of the worksheet is greater than zero and that the wording of this letter is identical to the wording specified in section 22a-449(d)-109(m) of the RCSA, as such regulations were constituted on the date shown immediately below.

(Date)

(Signature)

(Name)

(Title)

(4) If a local government owner or operator using the test to provide financial assurance finds that it no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator shall obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.

(5) The commissioner may require reports of financial condition at any time from the local government owner or operator. If the commissioner finds, on the basis of such reports or other information, that the

local government owner or operator no longer meets the financial test requirements of this subsection, the owner or operator shall obtain alternate coverage within 30 days after notification of such a finding.

(6) If the local government owner or operator fails to obtain alternate assurance within 150 days of finding that it no longer meets the requirements of the financial test based on the year-end financial statements or within 30 days of notification by the commissioner that it no longer meets the requirements of the financial test, the owner or operator shall notify the commissioner of such failure within 10 days.

(n) **Local government fund.**
A local government owner or operator may satisfy the requirements of subsection (c) of this section by establishing a dedicated fund account that conforms to the requirements of this section. Except as specified in subdivision (2) of this subsection, a dedicated fund may not be commingled with other funds or otherwise used in normal operations. A dedicated fund will be considered eligible if it meets one of the following requirements:

(1) The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order to pay for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum USTs and is funded for the full amount of coverage required under subsection (c) of this section, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining coverage; or

(2) The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order as a contingency fund for general emergencies, including taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum USTs, and is funded for 5 times the full amount of coverage required under subsection (c) of this section, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining coverage. If the fund is funded for less than 5 times the amount of coverage required under subsection (c) of this section, the amount of financial responsibility demonstrated by the fund may not exceed one-fifth the amount in the fund; or

(3) The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance or order to pay for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks. A payment is made to the fund once every year for 7 years until the fund is fully-funded. This 7 year period is hereafter referred to as the “pay-in-period.” The amount of each payment shall be determined by this formula:

$$\frac{TF\text{-}CF}{Y}$$

Where TF is the total required financial assurance for the owner or operator, CF is the current amount in the fund, and Y is the number of years remaining in the pay-in-period, and;

(A) The local government owner or operator has available bonding authority, approved through voter referendum (if such approval is necessary prior to the issuance of bonds), for an amount equal to the difference between the required amount of coverage and the amount held in the dedicated fund. This bonding authority shall be available for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks, or

(B) The local government owner or operator has a letter signed by the appropriate state attorney general stating that the use of the bonding authority will not increase the local government's debt beyond the legal debt ceilings established by the relevant state laws. The letter shall also state that prior voter approval is not necessary before use of the bonding authority.

(4) To demonstrate that it meets the requirements of the local government fund, the chief financial officer of the local government owner or operator, or guarantor shall sign a letter worded exactly as follows, except that the instructions in brackets are to be replaced by the relevant information and the brackets deleted:

Letter from Chief Financial Officer

I am the chief financial officer of (insert: name and address of local government owner or operator, or guarantor). This letter is in support of the use of the local government fund mechanism to demonstrate financial responsibility for (insert: "taking corrective action", "compensating third parties for bodily injury and property damage") caused by (insert: "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases") in the amount of at least (insert: dollar amount) per occurrence and (insert: dollar amount) annual aggregate arising from operating (an) underground storage tank(s) ("UST(s)").

USTs at the following facilities are assured by this local government fund mechanism: (List for each facility: the name and address of the facility where tanks are assured by the local government fund).

(Insert: "The local government fund is funded for the full amount of coverage required under subsection 22a-449(d)-109(c) of the Regulations of Connecticut State Agencies ("RCSA"), or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining coverage." or "The local government fund is funded for 5 times the full amount of coverage required under subsection 22a-449(d)-109(c) of the RCSA , or funded for part of the required amount of coverage and used in combination with other mechanisms(s) that provide the remaining coverage," or "A payment is made to the fund once every year for 7 years until the fund is fully-funded and (name of local government owner or operator) has available bonding authority, approved through voter referendum, of an amount equal to the difference between the required amount of coverage and the amount held in the dedicated fund" or "A payment is made to the fund once every year for 7 years until the fund is fully-funded and I have attached a letter signed by the State Attorney General stating that (1) the

use of the bonding authority will not increase the local government's debt beyond the legal debt ceilings established by the relevant state laws and (2) that prior voter approval is not necessary before use of the bonding authority").

The details of the local government fund are as follows:

Amount in Fund (market value of fund at close of last fiscal year):
(If fund balance is incrementally funded as specified in subdivision (3) of this subsection, insert:
Amount added to fund in the most recently completed fiscal year:
Number of years remaining in the pay-in period: ____)

A copy of the state constitutional provision, or local government statute, charter, ordinance or order dedicating the fund is attached.

I hereby certify that the wording of this letter is identical to the wording specified in section 22a-449(d)-109(n) of the RCSA, as such regulations were constituted on the date shown immediately below.

(Date)

(Signature)

(Name)

(Title)

(o) **Substitution of financial assurance mechanisms by owner or operator.**

(1) An owner or operator may substitute any alternate financial assurance mechanisms as specified in [section 22a-449(d)-109 of these regulations] this section, provided that at all times that [he] such owner or operator maintains an effective financial assurance mechanism or combination of mechanisms that satisfies the requirements of subsection [22a-449(d)-109 (d) of these regulations] (c) of this section.

(2) After obtaining alternate financial assurance as specified in [section 22a-449(d)-109 of these regulations] this section, an owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance.

(p) **Cancellation or nonrenewal by a provider of financial assurance.**

(1) [Except as otherwise provided, a] A provider of financial assurance may only cancel or fail to renew [an] a financial assurance mechanism by sending a notice of termination by certified mail or other trackable mail service approved by the commissioner to the owner or operator and the commissioner in accordance with the language of each instrument, as applicable.

[(A) Termination of a guarantee, a surety bond, or a letter of credit may not occur until 120 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(B) Termination of insurance or risk retention group coverage, except for non-payment or misrepresentation by the insured, or state-funded assurance may not occur until 60 days after the date on

which the owner or operator receives the notice of termination, as evidenced by the return receipt. Termination for non-payment of premium or misrepresentation by the insured may not occur until a minimum of 10 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.]

(2) If a provider of financial [responsibility] assurance cancels or fails to renew for reasons other than incapacity of the provider as specified in subsection [22a-449(d)-109 (q) of these regulations] (q) of this section, the owner or operator shall obtain alternate coverage as specified in this section within 60 days after receipt of the notice of termination. If the owner or operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, the owner or operator shall notify the [Director of the implementing agency] commissioner of such failure and submit electronically as specified on the department's internet website:
(A) The name and address of the provider of financial assurance;
(B) The effective date of termination; and
(C) The evidence of the financial assurance mechanism subject to the termination maintained in accordance with [subdivision 22a-449(d)-109 (r) (2) of these regulations] subsection (r) of this section.

(q) **Reporting by owner or operator.**
(1) An owner or operator shall submit [the appropriate forms] evidence of financial responsibility listed in [subdivision 22a-449(d)-109 (r) (2) of these regulations document current evidence of financial responsibility to the Director of the implementing agency] subsection (r) of this section to the commissioner within 30 days:

(A) [Within 30 days after] After the owner or operator identifies a release from an [underground storage tank] UST required to be reported under [subsections 22a-449(d)-105 (d) or 106 (c) of these regulations] sections 22a-449(d)-105 or 22a-449(d)-106 of the UST regulations;
(B) If the owner or operator fails to obtain alternate coverage as required by this section, [within 30 days] after the owner or operator receives notice of:
(i) Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor,
(ii) Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism,
(iii) Failure of a guarantor to meet the requirements of the financial test,
(iv) Other incapacity of a provider of financial assurance; or
(C) As required by [subdivisions 22a-449(d)-109 (f) (7) and (p) (2) of these regulations] subsection (e)(7) of this section and subsection (p)(2) of this section.
(2) An owner or operator shall certify compliance with the financial responsibility requirements of [sections 22a-449(d)-101 to 113, inclusive, of these regulations] the UST regulations on the notification as specified [in the new tank notification form when notifying the appropriate state or local agency of the installation of a new underground storage tank under subsection 22a-449(d)-102 (b) of these regulations] by commissioner in accordance with section 22a-449(d)-114 of the UST regulations.
(3) [The Director of the Implementing Agency] At any time, the commissioner may require an owner or operator to submit evidence of financial assurance as described in [subdivision 22a-449(d)-109 (r) (2) of these

regulations] subsection (r) of this section or other information relevant to compliance with this section [at any time].

(r) **Recordkeeping**.
[(1)] Owners or operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this section for an [underground storage tank] UST until released from [the requirements of section 22a-449(d)-109 of these regulations under subsection 22a-449 (d)-109 (t) of these regulations] such requirements under subsection (t) of this section. An owner or operator shall maintain such evidence at the underground storage facility or, if permitted, at the owner's or operator's place of business in accordance with section 22a-449(d)-114 of the UST regulations. [Records maintained off-site shall be made available upon request of the implementing agency.]

[(2) An owner or operator shall maintain the following types of evidence of financial responsibility:

(A)] (1) An owner or operator using [an] a financial assurance mechanism specified in subsections [22a-449(d)-109 (f) to (k), inclusive, or subsection 22a-449(d)-109 (m) of these regulations] (e) to (j), inclusive, of this section shall maintain a copy of the instrument worded as specified.

[(B)] (2) An owner or operator using a financial test or guarantee, or a local government financial test shall maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial reporting year. Such evidence shall be on file no later than 120 days after the close of the financial reporting year.

[(C)] (3) An owner or operator using a guarantee, surety bond, or letter of credit shall maintain a copy of the signed standby trust fund agreement and copies of any amendments to the agreement.

(4) A local government owner or operator using the local government bond rating test under subsection (l) of this section shall maintain a copy of its bond rating published within the last 12 months by Moody's or Standard & Poor's.

[(D)] (5) An owner or operator using an insurance policy or risk retention group coverage shall maintain a copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements.

[(E) An owner or operator covered by a state fund or other state assurance shall maintain on file a copy of any evidence of coverage supplied by or required by the State under subdivision 22a-449(d)-109 (*l*) (4) of these regulations.

(F) An owner or operator using an assurance mechanism specified in subsections 22a-449(d)-109 (f) to (m), inclusive, of these regulations shall maintain an updated copy of a certification of financial responsibility worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATION OF FINANCIAL RESPONSIBILITY

{Owner or operator} hereby certifies that it is in compliance with the requirements of section 22a-449(d)-109 of these regulations.

The financial assurance mechanism{s} used to demonstrate financial responsibility under section 22a-449(d)-109 of these regulations is {are} as follows:

{For each mechanism, list the type of mechanism, name of issuer, mechanism number (if applicable), amount of coverage, effective period of coverage and whether the mechanism covers "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases."}

{Signature of owner or operator}

{Name of owner or operator}

{Title}

{Date}

{Signature of witness or notary}

{Name of witness or notary}

{Date}

The owner or operator shall update this certification whenever the financial assurance mechanism(s) used to demonstrate financial responsibility change(s).]

(6) An owner or operator using a local government fund under subsection (n) of this section shall maintain the following documents:

(A) A copy of the state constitutional provision or local government statute, charter, ordinance, or order dedicating the fund, and

(B) Year-end financial statements for the most recent completed financial reporting year showing the amount in the fund. If the fund is established under subsection (n)(3) of this section using incremental funding backed by bonding authority, the financial statements shall show the previous year's balance, the amount of funding during the year, and the closing balance in the fund.

(C) If the fund is established under subsection (n)(3) of this section using incremental funding backed by bonding authority, the owner or operator shall maintain documentation of the required bonding authority, including either the results of a voter referendum under subsection (n)(3)(A) of this section, or attestation by the State Attorney General as specified under subsection (n)(3)(B) of this section.

(s) **Drawing on financial assurance mechanisms.**

(1) The [Director of the implementing agency] commissioner shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the [Director] commissioner, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if:

(A)(i) The owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism; and

(ii) The [Director] commissioner determines or suspects that a release from an [underground storage tank] UST covered by the mechanism has occurred and so notifies the owner or operator or the owner or operator has notified the [Director] commissioner pursuant to sections 22a-449(d)-105 or 22a-449(d)-106 of [these regulations]the UST regulations of a release from an [underground storage tank] UST covered by the mechanism; or

(B) The conditions of subdivisions [subdivisions 2a-449(d)-109(s) (2) (A) or (2) (B) (i) or (2) (B) (ii) of these regulations] (2)(A) or (2)(B)(i) or (2)(B)(ii) of this subsection are satisfied.

(2) The [Director of the implementing agency] commissioner may draw on a standby trust fund when:

(A) The [Director] commissioner makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the owner or operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under section 22a-449[ ](d)-106 of [these regulations] the UST regulations; or

(B) The [Director] commissioner has received either:

(i) Certification from the owner or operator and the third-party liability claimant(s) [and] or from attorneys representing the owner or operator and the third-party liability claimant(s) that a third-party liability claim should be paid. The certification shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATION OF VALID CLAIM

The undersigned, as principals and as legal representatives of {insert owner or operator} and {insert name and address of third-party claimant}, hereby certify that the claim of bodily injury {and/or} property damage caused by an accidental release arising from operating {owner's or operator's} underground storage tank should be paid in the amount of ${_____}.

{Signatures}

Owner or Operator

Attorney for Owner or Operator

(Notary) Date

{Signature(s)}

Claimant(s)

Attorney(s) for Claimant(s)

(Notary) Date

or

(ii) A valid final court order establishing a judgment against the owner or operator for bodily injury or property damage caused by an accidental release from an underground storage tank covered by financial assurance under this section [22a-449(d)-109 of these regulations] and the [Director] commissioner determines that the owner or operator has not satisfied the judgment.

(3) If the [Director of the implementing agency] commissioner determines that the amount of corrective action costs and third-party liability claims eligible for payment under subdivision [22a-449(d)-109 (s) (2) of these regulations] (2) of this subsection may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the first priority for payment shall be corrective action costs necessary to protect human health and the environment. The [Director] commissioner shall pay third-party liability claims in the order in which the [Director] commissioner receives certifications under subdivision [22a-449(d)-109(s) (2) (B) (i) of these regulations] (2)(B)(i) of this subsection, and valid court orders under subdivision [22a-449(d)-109(s) (2) (B) (ii) of these regulations] (2)(B)(ii) of this subsection.

(t) **Release from the requirements.**
An owner or operator is no longer required to maintain financial responsibility under this section for an [underground storage tank] UST after the tank or piping [has] have been [properly] permanently closed in accordance with section 22a-449(d)-107 of the UST regulations or, if corrective action is required, after corrective action has been completed and the tank or piping [has] have been [properly] permanently closed [as required by] in accordance with section 22a-449(d)-107 of [these regulations] the UST regulations.

(u) **Bankruptcy or other incapacity of owner or operator or provider of financial assurance.**

(1) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming an owner or operator as debtor, the owner or operator shall notify the [Director of the implementing agency] commissioner by certified mail or other trackable mail service approved by the commissioner of such commencement and submit the appropriate forms listed in [subdivision 22a-449(d)-109 (r) (2) of these regulations] subsection (r) of this section documenting current financial responsibility.
(2) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner or operator and the commissioner by certified mail or other trackable mail service approved by the commissioner of such commencement as required under the terms of the guarantee specified in subsection [22a-449(d)-109(g) of these regulations] (f) of this section.
(3) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a local government owner or operator as debtor, the local government owner or operator shall notify the commissioner by certified mail or other trackable mail service approved by the commissioner of such commencement and submit the appropriate forms listed in subsection (r) of this section documenting current financial responsibility.
[(3)] (4) An owner or operator who obtains financial assurance by a mechanism other than the financial test of self-insurance shall be deemed to be without the required financial assurance in the event of a bankruptcy or

incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, letter of credit, or state-required mechanism. The owner or operator shall obtain alternate financial assurance as specified in [section 22a-449(d)-109 of these regulations] this section within 30 days after receiving notice of such an event. If the owner or operator does not obtain alternate coverage within 30 days after such notification, [he] the owner or operator shall notify the [Director of the implementing agency] commissioner in writing.
[(4)] (5) Within 30 days after receipt of notification that a [state fund or other assurance] provider of financial assurance has become incapable of paying for assured corrective action or third-party compensation costs, the owner or operator shall obtain alternate financial assurance.

(v) **Replenishment of guarantees, letters of credit, or surety bonds.**

(1) If at any time after a standby trust is funded upon the instruction of the [Director of the implementing agency] commissioner with funds drawn from a guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the owner or operator shall by the anniversary date of the financial assurance mechanism from which the funds were drawn:
(A) Replenish the value of financial assurance to equal the full amount of coverage required, or
(B) Acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.
(2) For purposes of [subsection 22a-449(d)-109 (v) of these regulations] this subsection, the full amount of coverage required is the amount of coverage to be provided by subsection [22a-449(d)-109 (d) of these regulations] (c) of this section. If a combination of mechanisms was used to provide the assurance funds which were drawn upon, replenishment shall occur by the earliest anniversary date among the mechanisms.

[(w) **Suspension of enforcement.** {Reserved}

(x) **40 CFR Part 280.** Appendix I is incorporated by reference in its entirety.

(y) **Appendix II to Part 40 CFR 280-List of Agencies Designated To Receive Notifications**

Connecticut (State Form), Hazardous Materials Management Unit, Department of Environmental Protection, State Office Building, 79 Elm Street, Hartford, Connecticut 06106

(z) **Appendix III to 40 CFR Part 280-Statement for Shipping Tickets and Invoices**

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

Sec. 22a-449(d)-110. UST [system upgrading, abandonment and removal date.] systems temporarily taken out of service

[(a) **Petroleum UST system of which construction or installation began prior to November 1, 1985.**

No owner or operator of a petroleum UST system of which construction or installation began prior to November 1, 1985, shall use or operate any component of that UST system beyond September 1, 1989, or for longer than five years beyond its life expectancy as determined in accordance with section 22a-449 (d)-111

of these regulations, whichever date is later, but in no event later than December 22, 1998, unless such component is modified so as to comply with the standards for new UST systems specified in subdivisions 22a-449 (d)-102 (a) (1), (2), (3), (4), and (10) of these regulations. If life expectancy has not been determined in accordance with section 22a-449 (d)-111 of these regulations, such component shall not be used or operated unless such component is modified so as to comply with the standards for new UST systems specified in subdivisions 22a-449 (d)-102
(a) (1), (2), (3), (4) and (10) of these regulations. Not later than December 22, 1998 all existing UST systems shall be modified to comply with standards specified in subdivision 22a-449 (d)-102 (a) (5) of these regulations. If the UST system is not so modified in accordance with this subsection, it shall be removed or abandoned in accordance with the procedures specified in NFPA 30 and also as of December 22, 1988, the closure requirements in section 22a-449 (d)-107 of these regulations including applicable requirements for corrective action in section 22a-449 (d)-106 of the regulations.

(b) Hazardous substance UST system of which construction or installation began prior to December 22, 1988.

No owner or operator of a hazardous substance UST system of which construction or installation began prior to December 22, 1988, shall use or operate any component of that UST system beyond four years after the effective date of these regulations or for longer than five years beyond its life expectancy as determined in accordance with section 22a-449 (d)-111 of these regulations, whichever is later, but in no event later than December 22, 1998, provided however, that for UST systems used for the storage of benzene that date shall not be beyond September 1, 1989, or five years beyond the life expectancy, whichever is later, unless such component is modified so as to comply with the standards for new UST systems specified in subsection 22a-449 (d)-102 (a) of these regulations. The owner or operator of a hazardous UST system component for which the date of initial installation cannot be documented to the satisfaction of the commissioner and the life expectancy cannot be determined in accordance with section 22a-449 (d)-111 of these regulations, shall not use or operate such component beyond four years after the effective date of these regulations unless such component is modified so as to comply with the standards for new UST systems specified in subsection 22a-449 (d)-102 (a) of these regulations. If the UST system is not so modified in accordance with this subsection, it shall be removed or abandoned in accordance with the applicable procedures specified in NFPA 30 and as of December 22, 1988, the closure requirements in section 22a-449 (d)-107 of these regulations including applicable requirements for corrective action in section 22a-449 (d)-106 of these regulations.

(c) UST systems which comply with the standards specified in subsection 22a-449 (d)-102 (a) of these regulations.

No owner or operator of an UST system which complies with the standards specified in subsection 22a-449 (d)-102 (a) of these regulations shall use or operate any component of that UST system beyond its life expectancy as determined in accordance with section 22a-449 (d)-111 of these regulations. Prior to the last day of the life expectancy of a facility component, the owner or operator shall remove or abandon the UST system component in accordance with the procedures specified in NFPA 30 and the closure requirements in section 22a-449 (d)-107 of these regulations including applicable requirements for corrective action in section 22a-449 (d)-106 of these regulations.]

(a) The owner and operator of an UST system may temporarily take an UST system out of service. For purposes of this section, an UST system shall be considered temporarily out of service only when all regulated substances have been removed from an UST system, including from the piping, so that no more than 2.5 centimeters (i.e., one inch) of such substances, or residue from such substances, remain in the UST.

(b) The owner and operator of an UST system temporarily taken out of service shall comply with the

UST regulations, except that:

(1) Release detection shall not be required other than monthly measurement, recording, and recordkeeping of any regulated substance, residue and water level in the UST system; and

(2) Monthly and annual inspections shall not be required other than the monthly inspection of all of the items specified in the "UST Monthly Inspection Report For USTs Temporarily Out-of-Service" posted on the department's internet website.

(c) In addition to any other requirements of this section, beginning 90 days after an UST is taken temporarily out of service, the owner or operator shall leave vent lines open and functioning and shall cap and secure all other lines, pumps, manways, and ancillary equipment.

(d) The owner or operator of an UST system temporarily taken out of service may maintain any records required under the UST regulations in a location in the state of Connecticut, other than where the UST system is located, provided such records shall be made available to the commissioner upon request within the time frame specified in any such request. If no time frame is specified in the request, the requested records shall be submitted to the commissioner not later than 30 days after receipt of a request.

Sec. 22a-449(d)-111. UST [Life] life expectancy

[(a) This subsection, in conjunction with subdivision 22a-449 (d)-104 (b) (2) and subsections 22a- 449 (d)-104 (a), (c), (d), (e), (f) and (g) of these regulations specifies when a tank tightness test and line tightness test shall be performed, and when the owner and operator shall discontinue use of an UST system component in accordance with section 22a-449 (d)-110 of these regulations.

(b) Life expectancy determinations shall be conducted as follows:

(1) Life expectancy determinations shall be conducted for components of petroleum UST systems, the construction or installation of which begins on or after November 1, 1985, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another, within thirty (30) days following completion of installation or substantial modification of the component; and shall be conducted for components of petroleum UST systems, the construction or installation of which began prior to November 1, 1985, by May 8, 1986; as specified in subsection 22a-449 (d)-102 (b) of these regulations.

(2) Life expectancy determinations shall be conducted for components of hazardous substance UST systems, the construction or installation of which begins on or after the effective date of these regulations, including, but not limited to, UST systems which replace UST systems and UST systems which are moved from one location to another, within thirty (30) days following completion of installation or substantial modification of the component; and shall be conducted for components of hazardous substance UST systems, the construction or installation of which began prior to the effective date of these regulations, by 180 days after the effective date of these regulations; as specified in subsection 22a-449 (d)-102 (c) of these regulations.

(3) Life expectancy determinations shall not be required for underground vent and vapor recovery piping.

(c) Life expectancy shall be as follows:

(1) For fiberglass-reinforced plastic (FRP) UST system components, the period of the manufacturer's corrosion or structural warranty, whichever is shorter.

(2) For cathodically protected UST system components that meet the requirements of subsection 22a-449 (d)-102 (a) of these regulations, the period of the manufacturer's corrosion or structural warranty, whichever is shorter, or the life expectancy of the existing or replacement anode(s) as calculated using

standard formulae approved in writing by the commissioner. If the cathodic protection system malfunctions or fails to meet the structure to soil test voltage requirement in subsection 22a-449 (d)-103 (b) of these regulations, and is not repaired or replaced within thirty
(30) days, the life expectancy of the UST system components protected by the system shall be reestablished in accordance with either subdivision 22a-449 (d)-111 (c) (3) or subsection 22a-449 (d)- 111 (d) of these regulations. If life expectancy shall be reestablished in accordance with subdivision 22a-449 (d)-111 (c) (3) of these regulations, the period specified by subdivision 22a-449 (d)-111 (c)
(3) of these regulations shall be deemed to have begun on the earliest date of malfunction or the earliest date on which the structure to soil test voltage reading was less negative than minus 0.85 volts, as applicable, provided that the period specified by subdivision 22a-449 (d)-111 (c) (3) of these regulations shall not extend beyond the last day of the component's initial life expectancy period.

(3) For UST system components not covered in subdivision 22a-449 (d)-111 (c) (1) of these regulations and subdivision 22a-449 (d)-111 (c) (2) of these regulations, fifteen years from the date of installation. If the date of installation cannot be documented, the life expectancy shall be determined by a method approved by the commissioner in writing.

(d) The life expectancy of an UST system component may be determined by a method other than those set forth in subsection 22a-449 (d)-111 (c) of these regulations upon written approval of the commissioner.]

(a) No owner or operator of an UST system shall use or operate any tank or piping that routinely contains product beyond its life expectancy as determined in accordance with this section. Prior to the last day of the life expectancy of any such tank or piping, the owner or operator shall close such tank or piping in accordance with the closure requirements specified in section 22a-449(d)-107 of the UST regulations.

(b) From the date of installation, the life expectancy for a tank or piping that routinely contains product shall be as follows:

(1) For a tank or piping constructed of cathodically protected steel, or a flex connector made of steel, life expectancy is 30 years;

(2) For a tank or piping that does not meet the requirements of subdivision (3) of this subsection and is made of fiberglass-reinforced plastic, any other non-metallic material, or a tank constructed of steel and clad or jacketed with a non-corrodible material, life expectancy is 30 years, except that for a tank or piping that meets the following criteria, life expectancy is 40 years:

(A) The tank and piping is used for the storage of petroleum only;

(B) The tank is constructed of:

(i) single-walled fiberglass-reinforced plastic or composite steel, or

(ii) double-walled fiberglass-reinforced plastic or composite steel;

(C) The tank has a striker plate beneath each access point present since time of installation;

(D) Piping is non-metallic;

(E) The tank or piping has piping containment sumps and under dispenser containment sumps that are liquid tight and monitored;

(F) For a single-walled tank, the tank has passed a tightness test within 12 months, before or after, {insert the effective date of the UST regulations}, and passes a tightness test annually thereafter until permanently closed;

(G) Except for a double-walled tank using brine and vacuum, the double walled tank has passed an interstitial test within 12 months, before or after, {insert the effective date of the UST regulations}, and passes an interstitial test annually thereafter until permanently closed. Such interstitial test must

meet the requirements of the Petroleum Equipment Institute, Recommended Practice 1200-12;

(H) The tank or piping is not located within an aquifer protection area or within 1,000 feet of a potable well, not including potable wells on the site where the tank is located; and

(I) Line leak testing, when required by section 22a-449(d)-104 of the UST regulations, is conducted every 6 months.

(3) For a double-walled tank or double-walled piping made of fiberglass- reinforced plastic, any other non-metallic material, or a tank constructed of steel and clad or jacketed with a non-corrodible material:

(A) Using interstitial monitoring that does not monitor both the primary containment and secondary containment such as a sensor in a dry space, life expectancy is 40 years; or

(B) Using continuous interstitial monitoring that monitors both the primary containment and secondary containment such that the inner and outer walls are continuously monitored using technology such as inert gas, or liquid, or under constant vacuum, life expectancy is 45 years; and

(4) For a tank or piping constructed of any substance not identified in subdivisions (1) to (3), inclusive, of this subsection, life expectancy is 15 years.

(c) If the month and year of the installation of either a tank or piping that routinely contains product cannot be reasonably determined, the owner and operator shall immediately:

(1) Discontinue use of such tank or piping; and

(2) Permanently close such tank or piping in accordance with section 22a-449(d)-107 of the UST regulations.

(d) Notwithstanding the provisions of subsection (b) of this section, the period of life expectancy for either tanks or piping that routinely contains product, may upon request, or upon the commissioner's own initiative, be modified by the commissioner. The commissioner may request any information the commissioner deems necessary in responding to a request. Any modification by the commissioner under this subsection may include any conditions the commissioner deems appropriate.

Sec. 22a-449(d)-112. UST system location transfer

[No component of an UST system shall be moved from one location to another without prior written approval of the commissioner.]

(a) Except for a dispenser, no owner or operator of an UST system shall move a component of an UST system for use at another location, including another location at the same underground storage facility, without the prior written approval of the commissioner. Any approval under this section may include any conditions the commissioner deems appropriate. For purposes of section 22a-449(d)-111 of the UST regulations, the life expectancy of a tank or piping that routinely contains product relocated under this section shall be based on the date such tank or piping was originally installed, not the date such tank or piping was relocated.

(b) An owner or operator of an UST system shall not install or reinstall a dispenser from another location, including from another location at the same underground storage facility, unless such dispenser is equipped with a containment sump that meets the requirements of an under-dispenser containment sump.

Sec. 22a-449(d)-113. Transfer of UST system ownership, possession or control

(a) [As of November 1, 1985, no] No owner or operator shall transfer ownership, possession or control of any [petroleum] UST system without providing full disclosure to the transferee [of the status of the UST system with respect to compliance with these regulations at least fifteen (15) days prior to the transfer. Such disclosure shall include an up-to-date copy of the information submitted to the commissioner pursuant to

subsection 22a-449 (d)-102 (b) of these regulations and, as of the effective date of these regulations, such disclosure shall include an up-to-date copy of all information submitted to the commissioner pursuant to section 22a-449 (d)-102 of these regulations] of all information regarding any outstanding warning letters, notices of violation, orders or judgments, and the current notification submitted pursuant to section 22a-449(d)-114(a) of the UST regulations. Such disclosure shall be made at least 15 days prior to any such transfer.

(b) [As of the effective date of these regulations, no owner or operator shall transfer ownership, possession or control of any hazardous substance UST system without full disclosure to the transferee of the status of the UST system with respect to compliance with these regulations at least fifteen (15) days prior to the transfer. Such disclosure shall include an up-to-date copy of the information submitted to the commissioner pursuant to section 22a-449 (d)-102 of these regulations] In connection with the transfer of ownership, possession or control of any UST system, the transferor shall require that the transferee submit an updated notification under section 22a-449(d)-114(a)(3)(B) of the UST regulations not later than 30 days after such transfer of ownership, possession or control. Any such notification shall include at a minimum updated information regarding the transfer of ownership, possession or control and any other changes to such UST system. The transferor of an UST system shall continue to be liable for compliance with the UST regulations until an updated notification of an ownership transfer, or change in possession or control of any UST system is provided to the Department in accordance with this section.

Sec. 4. The Regulations of Connecticut State Agencies are amended by adding section 22a-449(d)-114 as follows:

(NEW) Sec. 22a-449(d)-114. Notification and recordkeeping

(a) Notification requirements.

(1) Each notification required by the UST regulations or by the Connecticut General Statutes, shall be submitted by the owner or operator of an UST system or an underground storage facility on forms furnished by and in a manner prescribed by the commissioner on the department's internet website and shall contain all information prescribed by the commissioner. Each notification shall be accompanied by any required fee and shall be deemed incomplete if not accompanied by the required fee. In the event that no form is prescribed by the commissioner, the notification shall be submitted in a manner prescribed by the commissioner on the department's internet website.

(2) The annual notification required under section 22a-449(e) of the Connecticut General Statutes shall be submitted within the time period specified by the commissioner on the department's internet website, which time period shall be a minimum of 30 days and shall end no later than October 10 of each year.

(3) The owner or operator shall submit notification of the following to the commissioner:

(A) Installation - Within 30 days following the completion of the installation of a UST system. A copy of the notification submitted to the commissioner shall also be submitted to the local fire marshal for the municipality in which such UST system is installed.

(B) Changes to Notification - Within 30 days of any changes in the information in the most recent notification submitted to the commissioner under this subdivision;

(C) Temporarily Out-of-Service - Within 30 days of rendering an UST temporarily out-of-service in accordance with section 22a-449(d)-110 of the UST regulations;

(D) Closure

(i) Not less than 30 days before the date beginning closure in accordance with section 22a-449(d)-107 of the UST regulations;

(ii) Not later than 30 days after removing an UST from the ground or rendering the tank unusable or permanently removing piping in accordance with section 22a-449(d)-107 of the UST regulations; and
(E) Other Notifications - Any other notification required by the UST regulations.
(4) Any person who sells a tank intended to be used as an UST shall notify the purchaser of the obligation to provide notification to the commissioner within 30 days of completion of the installation of such tank. Any such notice shall be in writing on a document provided to the purchaser including, but not limited to, a bill of sale, shipping paper, or invoice for such tank.
(b) Recordkeeping.
(1) General Recordkeeping and Retention Requirement
(A) Except as may be otherwise specified in the UST regulations, including subdivisions (2) and (3) of this subsection, the owner or operator of an UST system shall maintain all records regarding each component of the UST system, including, but not limited to, installation, operation, compatibility, inspection, testing, calibration, release detection, repair, release or suspected release, and any record or report required to demonstrate compliance with any requirement of the UST regulations, other than records relating to routine maintenance of such system such as changing filters and lubricating parts.
(B) The owner or operator of an UST system shall maintain the records specified in subdivision (1) of this subsection:
(i) During the operational life of an UST system component, at the underground storage facility, except as may otherwise be provided for in section 22a-449q of the Connecticut General Statutes; and
(ii) After the operational life of an UST system component, at any location. Such records shall be maintained and shall be made available for inspection for one year beyond the operational life of such component.
(2) Records of Closure

The owner or operator of an UST system shall maintain all records regarding closure, including the report prepared pursuant to section 22a-449(d)-107(c) of the UST regulations in accordance with the following requirements:

(A) All such records shall be maintained for 3 years after completion of all actions required pursuant to section 22a-449-107 of the UST regulations for assessing a site at closure;

(B) Such records shall be maintained by the current owner of the property at the location where an UST system was closed; and

(C) Such records shall be maintained by the owner or operator of the UST system at the time that closure of an UST system was completed at any location.

(3) Records of Repairs or Replacement Involving a Confirmed Release

When, in the course of conducting a repair or replacement, a release is discovered from the part of the UST being repaired or replaced, all records of such repair shall be maintained for 3 years after assessing the site at closure as required pursuant to section 22a-449(d)-107 of the UST regulations. Such records shall be maintained by the current owner of the property at the location where an UST system was closed and at any location by the owner and operator of the UST system at the time that closure of an UST system was completed.
(c) Availability of Records.
(1) Except as otherwise provided for in section 22a-449q of the Connecticut General Statutes:
(A) All records that shall be maintained at the underground storage facility where the UST is located, shall immediately be made available for inspection upon request by the commissioner.
(B) All records that shall be maintained but are not required to be maintained at the underground storage facility where the UST is located, shall be made available to the commissioner, at a location specified by the

commissioner, not later than 15 days after a request by the commissioner.
(2) Unless the commissioner specifies otherwise, all records required to be maintained pursuant to subsection (b) of this section may be maintained in an electronic format and, if requested by the commissioner, provided in an electronic format.

Statement of Purpose:

The existing Underground Storage Tank (UST) regulations, R.C.S.A. sections 22a-449(d)-1 and 22a-449(d)-101 to 22a-449(d)-113, inclusive, authorized by C.G.S. section 22a-449(d), identify the performance standards for owners and operators of state regulated and federally regulated UST systems. The proposed amendments to the UST regulations seek to modernize and update the UST regulations by adding clarity, consistency, and flexibility for certain existing requirements. These updates are consistent with current technologies and will eliminate outdated standards. Of particular benefit to owners and operators of UST systems is the extension of life expectancy for new tanks and certain existing tanks. Additionally, a new section is being added as a centralized location for notification and recordkeeping requirements and a new administrative civil penalties schedule is being added to R.C.S.A. section 22a-6b-8.