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

(a) **Applicability.**

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) Exemptions. 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 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 petroleum; and

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

(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 that are not part of a wastewater treatment facility regulated under section 22a-430 of the Connecticut General Statutes;

(ii) Any UST system containing radioactive material that is regulated under the Atomic Energy Act of 1954, 42 USC, Chapter 23; and

(iii) Any UST system that is part of an emergency generator system at a nuclear power generation 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)-114, inclusive, of the Regulations of Connecticut State Agencies and section 22a-449o of the Connecticut General Statutes and shall:

(i) 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; and

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

(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.

(c) **General.** Nothing in sections 22a-449(d)-101 to 22a-449(d)-114, inclusive of the Regulations of Connecticut State Agencies shall affect the commissioner's authority to enforce statutes, regulations, permits or orders administered, adopted or issued by the commissioner, including, but not limited to, the 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)-114, inclusive, of the Regulations of Connecticut State Agencies, the following terms shall have the meanings given below:

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

(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;

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

(4) "Approved training program" means a Class A, B, or C Operator training program approved by the commissioner pursuant to section 22a-449(d)-108 of the UST regulations;

(5) "Cathodic protection" means 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;

(6) "CFR" means the Code of Federal Regulations revised as of May 7, 2025, unless otherwise specified;

(7) "Class A operator" means a person who has successfully completed the training and certification requirements 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;

(8) "Class B operator" means a person who has successfully completed the training and

certification requirements 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;

(9) "Class C operator" means a person who has successfully completed the training and certification requirements of 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;

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

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

(13) "Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to 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 2 UST systems should be allocated equally between them;

(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;

(16) "Day" means calendar day;

(17) "Department" or "DEEP" means the Connecticut Department of Energy and Environmental Protection;

(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;

(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;

(20) "Double-walled underground storage tank" 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;

(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;

(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;

(24) "Excavation zone" means the area or location bounded by the ground surface, walls, and floor into which an UST system is placed at the time of installation;

(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, including, but not limited to, the primary or secondary containment system;

(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 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;

(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;

(29) "Free product" refers to a regulated substance that is present as a non-aqueous phase liquid such as liquid not dissolved in water;

(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;

(31) "Hazardous substance" means a substance defined in 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 of motor fuel additives or (B) any substance regulated as a hazardous waste under subsection (c) of Section 22a-449 of the Connecticut General Statutes;

(32) "Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance;

(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;

(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;

(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;

(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;

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

(39) "Motor fuel" means a complex blend of hydrocarbons typically used in the operation of a motor engine, such as motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any blend containing one or more of these substances, including: motor gasoline blended with alcohol;

(40) "Non-aqueous phase liquid" or "NAPL" means a liquid that is not dissolved in water;

(41) "Operational life" means the period beginning when installation of the UST system component commences until such component has been permanently closed and for any component not subject to permanent closure, when the component has been permanently removed from the UST system or rendered unusable;

(42) "Operator" means any person in control of, or having responsibility for, the daily operation of the UST system;

(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;

(45) "Person" means an individual, trust, firm, association, partnership, company, corporation, nonstock corporation, limited liability company, the federal government, the state, including any agency or political or administrative subdivision of the state, municipality, commission, interstate body, 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 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;

(47) "Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other substances but

does not include a mixture of petroleum and hazardous substances;

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

(49) "Pipeline facilities" means 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;

(51) "Regulated substance" means any hazardous substance or petroleum;

(52) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of regulated substances 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 designed and used to hold or contain regulated substances, or as otherwise authorized by the commissioner;

(53) "Release detection" means determining whether a release of a regulated substance has occurred from an UST system component or whether water is entering an UST system;

(54) "Repair" means to restore a UST system component to proper operating condition and does not constitute replacement of an UST system component;

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

(56) "RSRs" means the state remediation standard 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;

(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;

(59) "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 stormwater and wastewater does not include treatment except where incidental to conveyance;

(60) "Surface impoundment" means 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;

(61) "Tank" means a stationary 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;

(62) "Under-dispenser containment sump" means containment underneath a dispenser system designed to prevent releases from the dispenser and piping within or above the under

dispenser containment sump from leaving the UST system;

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

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

(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 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 UST of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes, meaning not intended for resale;

(B) 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):

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

(ii) Which is an intrastate pipeline facility regulated under state laws as provided in 49 USC, Chapter 601, 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) Surface impoundment, pit, pond, or lagoon;

(F) Stormwater or wastewater collection system;

(G) Flow-through process tank;

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

(I) Storage tank situated in an underground area;

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

(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. "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;

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

(Effective July 28, 1994; Amended May 31, 2012; Amended December 1, 2021; Amended May 7,

2025)