Section 35
Storage Tanks

35.1 Scope: The purpose of this Section is to regulate all underground and aboveground storage tanks that hold fuel oil and chemicals, and which are currently excluded from regulations of the State Department of Energy and Environmental Protection (DEEP).

35.2 Definitions: The following words, terms and phrases when used in this Section shall have the meanings ascribed to them below, except where the context clearly indicates a different meaning:

35.2.1 Aboveground: Any facility or component of a facility that has ninety-one percent (91%) or more of its capacity at or above the surface of the ground.

35.2.2 Aboveground Tanks: All aboveground containers used for residential fuel oil storage and nonresidential fuel oil as well as those for storing hazardous materials.

35.2.3 ASTM: American Society for Testing Materials.

35.2.4 CFR: Code of Federal Regulations.

35.2.5 Fuel Oil: Oil or petroleum-based liquids used for heating or cooking purposes, including, but not limited to diesel fuel, #2 fuel oil., propane or kerosene.

35.2.6 Hazardous Materials: Any material defined by 40 CFR Part 261, Subpart C as may be amended from time to time, generally having the characteristics of one (1) or more of the following: ignitability, corosivity, reactivity or toxicity, but not including a hazardous waste currently regulated by the State Department of Energy and Environmental Protection.

35.2.7 Listed: Approved by the Commissioner of Energy and Environmental Protection in accordance with Section 22a-449(d)-1 of the Regulations of Connecticut State Agencies, as may be amended from time to time.

35.2.8 NFPA: National Fire Protection Association.

35.2.9 Nonresidential Fuel Oil Storage: Storage of less than twenty-one hundred (2,100) gallons of fuel oil at nonresidential locations.

35.2.10 Piping: Any pipes intended to regularly hold or convey fuel oil or hazardous materials.

35.2.11 Residential Fuel Oil Storage: Storage of fuel oil at any residential building, regardless of volume stored.

35.2.12 Underground: Any facility or component of a facility that has ten percent (10%) or more of its capacity below the surface of the ground and not readily visible for inspection.

35.2.13 Underground Tanks: All underground containers used for residential fuel oil storage and nonresidential fuel oil storage as well as those for storing hazardous materials.

35.3 Registration of Existing Tanks:

35.3.1 Owners of all existing underground tanks shall register the tanks with the ZEO on a form provided by the ZEO. Information to be provided shall include, but is not limited to:

(a) Address of tank location
(b) Approximate location of a tank in relation to nearby building(s)
(c) Approximate date of installation
(d) Type of material tank consists of and approximate volume
(e) Diameter and length of all buried piping
(f) Copy of manufacturer's warranty, if available
(g) Type of material tank contains
(h) Such other information as may be required

35.3.2 This registration shall be complete by **July 1, 2015**.

35.4 New Installations: No underground or aboveground tanks shall be installed at any facility, such as a home or business, unless the installation complies with the requirements in this Section.

35.5 Permits: A permit to install an underground or aboveground tank must be completed by the applicant and approved by the ZEO prior to the initiation of any work. The permit shall contain the tank's street address, location on the property and the type of tank, as well as other information deemed appropriate by the ZEO.

35.6 Tank Types:

35.6.1 All new underground tanks shall be listed, double-walled steel or single-walled fiberglass reinforced plastic tanks. Steel tanks must be cathodically protected for a minimum of thirty (30) years, and equipped with a permanent cathodic protection monitoring device and be externally coated with a factory-applied coating designed to retard corrosion in underground locations. Fiberglass-reinforced plastic tanks must be chemically compatible with the material to be contained, as determined by the tank manufacturer.

35.6.2 All new aboveground tanks shall be UL approved tanks installed in accordance with all state and local building codes. The tanks shall be installed inside of a

secondary containment unit that is equal to or greater than one half of the capacity of the primary storage tank.

35.7 Installation: Installation of all tanks and related components shall conform to NFPA 30, as amended, and the manufacturer's installation specifications; whichever imposes the most stringent requirements. Within thirty (30) days after the completion of the installation, but prior to the use of the tank, the owner of the tank must submit a statement to the ZEO, signed by the tank installer, certifying that the installation has been carried out in accordance with the provisions of this Section.

35.8 Piping: All piping must be installed by a plumber licensed in the state. Sleeving shall be provided at all points where the supply or return piping is underground, as well as through the foundations all or if this piping is to be buried in or below a concrete floor, it shall be sleeved in at least a four-inch diameter schedule 40 plastic conduit meeting the requirement of ASTM D-1785 or equivalent, with appropriate tight joints. All piping and the tank shall hold an air pressure of five pounds per square inch gauge (5 psig) for at least ten (10) minutes after backfilling, but prior to use. A statement certifying the successful completion of this air test must be signed by the plumber and submitted to the ZEO within thirty (30) days of the test, but prior to use of the piping.

35.9 Inspection: As further assurance that installations are performed in accordance with applicable requirements, as detailed above, an inspection of all installations must be made by the ZEO and Fire Marshal, who must be notified at least twenty-four (24) hours prior to an installation.

35.10 Life Expectancy:

35.10.1 The life expectancy of all fiberglass-reinforced plastic underground tanks installed after **July 1, 2015** shall be indicated in the manufacturer's corrosion warranty. The life expectancy for all cathodically protected underground tanks installed after **July 1, 2015** shall be as that indicated in the tank manufacturer's corrosion warranty.

35.10.2 This life expectancy can be extended for up to five (5) additional years beyond this life expectancy if no leaks have been detected previously and no leaks are detected in this extended life expectancy, as detailed in Subsection 35.13 of these Regulations.

35.11 Leaks: If any tank or piping is determined to have a leak at any time, use of the tank shall be immediately discontinued, the tank shall be emptied and the ZEO notified within two (2) business days.

35.11.1 The ZEO, in consultation with the Department of Energy and Environmental Protections, shall have the right to require that reasonable efforts be taken to recover lost products and remove and properly dispose of contaminated materials, such as soil.

35.11.2 If only the piping is leaking, it may be replaced or repaired as necessary, in general conformance with the requirements for piping in the "New Installation" section of these Regulations.

35.11.3 If the tank leaks before the life expectancy has been reached or in the extended life expectancy, it shall be substantially emptied and removed or abandoned in accordance with NFPA-30. This removal or abandonment must be done within ninety (90) days of the detection of a leak.

35.12 Abandonment or Removal: After the life expectancy, or the extended life expectancy, has been reached, the tank shall be substantially emptied and removed or abandoned in accordance with NFPA-30. This removal or abandonment must be achieved within six (6) months after reaching the life expectancy or extended life expectancy, whichever is applicable.

35.13 Leak Detection:

35.13.1 All underground tanks shall be monitored by the tank owner for excessive, unanticipated product loss on a regular basis. This monitoring shall consist of the following minimum procedures, or an equivalent method approved by the ZEO.

(a) Records shall be kept of average product use per degree-day for each heating fuel tank. If this ration shows and increase or decrease greater than ten percent (10%) in any single monitoring period, further investigation shall be initiated to determine the cause.

(1) Such further investigation may include but not be limited to review of product use at location of tank, visual inspection of the tank components or the use of more sophisticated leak detection methods.

(2) If this further investigation fails to identify the cause of the product loss, the ZEO shall be notified within two (2) business days. The ZEO shall exercise general oversight in the determination and investigation of any apparent leaks at this stage. The ZEO shall have the right to require precisions hydrostatic testing and/or partial or entire excavation of the tank and related components, if necessary.

(b) These monitoring reports and any supporting documentation of product use shall be submitted to the ZEO annually on July 1st or upon his request.

35.14 Appeals: Any person aggrieved by a decision of the ZEO in relation to the provisions of this article may appeal to the Zoning Board of Appeals. The Board shall schedule a public hearing after proper notice to investigate into the facts and vacate, modify or affirm the decision of

the ZEO. Any such action by the Board shall be recorded on the permit and/or registration form for such tank.

35.15 Penalties: Any person who violates any provision of this article including the failure to register an underground tank pursuant to Section 35.3.1 shall be subject to a fine of not more than one hundred dollars ($100.00) per day or portion thereof during which a violation is maintained. The ZEO may also enforce the provisions of these Regulations by seeking injunctive relief in a Court of competent jurisdiction.