

At a Special Town Meeting held on February 28, 1995, at the Plainfield Town Hall, the following Ordinance was adopted:

ORDINANCE #102

TOWN OF PLAINFIELD

ORDINANCE PERTAINING TO THE INSTALLATION, OPERATION, MAINTENANCE AND MONITORING OF UNDERGROUND STORAGE FACILITIES

Section 1. Authority, Title and Purpose

1.1 The purpose of these regulations is to minimize and / or prevent contamination of the surface and ground water resources of the Town resulting from a failure of underground storage facilities or underground transmission lines of above ground storage facilities which store hazardous materials, oil or petroleum liquids. This Regulation establishes standards and criteria for the installation, operation, maintenance and monitoring of such facilities not otherwise regulated by the State of Connecticut. (State)

1.2 These regulations shall not affect storage facilities which are entirely above ground, or free standing tanks in below grade portions of buildings nor alter the existing controls exercised by the State of Connecticut, its agencies or the Town of Plainfield through the Fire Marshal's Office or Building Official.

Section 2. Application of Regulations

2.1 The provisions of this regulation shall apply to all facilities in the Town which are not regulated pursuant to Section 22a-449(d)-1 of the regulations of Connecticut State Agencies. This includes, but is not limited to, underground facilities for the storage of fuel oil, waste oil, gasoline, hazardous materials, and petroleum liquids with a total nominal capacity of less than 2,100 gallons as well as the underground transmission lines of above ground storage facilities.

Section 3. Definitions

"Abandoned" shall mean an underground storage tank out of service for a continuous period in excess of six months for which a temporary closure permit has not been granted.

"Aquifer Protection District" includes the primary and secondary recharge areas of designated aquifers which are capable of yielding useable amounts of water for present and potential public supplies. Such district is shown on a map titled "Town of Plainfield, Aquifer Protection District" on file in the Office of the Town Clerk.

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

"Double Walled Tank" a UL listed container with two complete shells with both primary and secondary protection. It shall have continuous 360" intersitial space between the primary and secondary shell. An approved intersitial monitor shall continuously monitor this space.

"Engineer" is a Connecticut licensed professional engineer.

"Existing Facility" means a facility for which construction began prior to the effective date of these regulations.

"Facility" Means a system of interconnected pipes, tanks, pumps, vaults, fixed containers and appurtenant structures including any monitoring devices, either singly or in any combination, which are used or designed for use in the storage, transmission or dispensing of oil, petroleum or liquid hazardous materials.

"Failure" means a condition failing to meet State criteria for a precision tightness test or which allows the uncontrolled passage of a liquid into or out of a facility including but not limited to a discharge into the waters of the Town.

"Failure Determination" means the evaluation of a facility component in accordance with Section 10 or Section 11 of these Regulations to determine if a failure has occurred.

"Groundwater" is the water present in the zone of saturation, and is considered a water of the Town.

"Hazardous Materials" means those substances listed as such by the EPA in all forms.

"High Groundwater" means seasonal high water table within 36" of the ground surface.

"Life Expectancy" means the time period within which a failure is not expected to occur as determined in accordance with Section 9 or Section 10 of these Regulations.

"Life Expectancy Determination" means the evacuation of a facility component in accordance with Section 10 of these Regulations.

"Liquid" means any liquid product including but not limited to oil, petroleum, or hazardous materials.

"New Facility" means a facility for which construction or installation began on or after the effective date of these Regulations, including but not limited to facilities which replace or modify existing facilities and facilities that are moved from one location to another.

"NFPA 30" means the National Fire Protection Association publication number 30 titled "Flammable and Combustible Liquid Code" as enforced by the Local Fire Marshals Office.

"Nonresidential Facility" means a facility which serves any commercial, industrial, institutional, public or other building or use including but not limited to hotels, motels, boarding houses,

hospitals, nursing homes and correctional institutions but excludes private residential buildings. This refers only to nonresidential underground facilities that are not regulated pursuant to Section 22a-449(d)-1 of the Regulations of Connecticut State Agencies.

"Monitoring System" means a full time approved system installed for the purpose of early detection of leaks such as observation wells, visual and / or audible alarms or their equivalent.

"Observation Well" means a dug or drilled cased well that can be used for detecting the presence of flammable or combustible liquids which is drilled to a depth intercepting the water table and is installed and monitored in an approved manner.

"Oil or Petroleum Liquid or Product" means oil or petroleum distillate of an/ kind in a liquid form but not limited to waste oils and distillation products such as fuel oil, kerosene, naphtha, gasoline and benzene.

"Operator and. / or Owner" shall mean a person who is ultimately responsible for maintaining the facility in conformance with the applicable statutes and regulations and all required permits.

"Owner" is the person, persons or government having legal ownership of a storage facility.

"Out of Service" means not in use in that no filling or withdrawal of product takes place.

"Product Line Leak Detector" means a device designed to detect product or pressure loss in a pressurized product line from a remote pumping station.

"P.S.I." means pounds per square inch

"Qualified Person" means a representative certified by the manufacturer of a product being installed or tested to fulfill the activities he / she is doing.

"Remote Pumping System" means a pressurized product line system in which flammable or combustible liquids are supplied to a point away from the tank by means of a pumping unit.

"Replacement or Substantial Modification" means the construction of any additions to an existing storage facility, or any restoration, refurbishment, or renovation which significantly impairs or affects the physical integrity of the storage facility or its monitoring system.

"Residential Building" means any house, apartment, trailer, mobile home or other structure occupied by an individual as a dwelling unit.

"Secondary Containment" means techniques that may include impervious liners, double-walled tanks, or equivalent methods approved by the local Fire Marshals Office.

"Storage Facility" is one or more tanks at a particular site together with all components thereof, used or designed to be used for the storage of any product within the scope of this regulation.

"Tank" shall mean any structure either aboveground or below ground used or designed to be used for the storage of any liquid or product within the scope of this regulation.

"Transmission Lines" means the piping and/or tubing either above or below ground that lead to or from an underground storage facility for the purpose of supplying fuel or product to a user or device.

"UL Listed" means included in a current list or report of approved equipment or materials or methods published by the Underwriters Laboratories, Inc.

"Underground Storage" means that when referring to a facility or facility component that 5% 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 visible for inspection.

Section 4. Prohibitions

4.1 New underground storage facilities are hereby prohibited in areas of high groundwater, within 100 of a wetland or watercourse, and in areas defined as lying within the Aquifer Protection District.

4.2(a) No owner or operator shall be permitted to install an underground storage facility or bury transmission lines without obtaining permits from the Building Official, Fire Marshal and Planning & Engineering Department.

4.2(b) At the time of permit application the owner and/or operator shall provide the following information to the Building Official and Fire Marshal's Office:

- A. Any licences or manufacturers certificates documenting their ability to do tank installation.
- B. The facility location, tank capacities and proposed contents.
- C. The type and proposed use of the facility as well as details of all monitoring systems to be used.
- D. The manufacturers stated life expectancy of the tanks being installed, materials used in construction and details of the warranty.
- E. Installation procedures to be followed.
- F. Zoning permit approving the proposed site

No installation work can be done prior to obtaining the required permit.

4.3 No owner or operator shall be permitted to repair an underground tank or transmission line without notifying the Fire Marshal within 24 hours.

4.4 The burial of transmission lines from an above ground facility is no permitted without the protection of a safety shield or sleeve equipped with a continuous leakage monitoring device.

4.5 No underground storage facility shall be relocated from one location to another without prior written approval from the Fire Marshal, Building Official and the Planning & Engineering Department.

4.6 Used underground storage facilities shall not be permitted to be reused in any manner within the Town of Plainfield after their removal unless documentation certifying the facilities integrity is provided.

4.7 Used underground storage facilities or tanks shall not be transported over the roads of Plainfield unless they have been cleaned on site or the contents rendered inert in accordance with the provisions of NFPA 30.

4.8 "As built" plans of the facility shall be submitted by the facility owner to all approving authorities.

Section 5. Installation and Registration Reporting

5.1 As of the effective date of these Regulations, the owner and/or operator of any existing underground storage facility hereby regulated shall register such facility with the Fire Marshal's Office. This registration shall take place in writing within six (6) months of the effective date of these regulations. This notification shall include, but is not limited to, location of facility, type and quantity of product stored, age of facility, size of tanks, manufacturer and installer of tanks, current owner and operator as well as other required information for a new tank installation.

5.2 The Building Official shall maintain a list of all tanks installed subsequent to this ordinance.

Section 6. Design, Construction, Installation and Maintenance

6.1 All new facilities and any new components of an existing facility shall conform to the following standards.

- A. Each new underground tank shall be either, (1) a UL Listed double wall fiberglass reinforced plastic tank equipped with overfill protection and contact plates under all fill and gauge openings and is chemically compatible with the proposed contents as stated by the manufacturers warranty, (2) OR it must be a U.L. Listed steel tank externally coated with a factory installed resistant coating approved by the manufacturer for the proposed purpose and equipped with cathodic protection, overfill containment, leak monitoring devices, with contact plates under all fill and gauge openings. All underground piping shall be double walled. Leakage monitoring shall be installed in tank and line intersitial spaces.
- B. The tanks to be installed shall meet all manufacturers specifications and shall not be altered at the site without written approval of the manufacturer prior to the work being done.
- C. The tank must be designed for the specific purpose of underground installation.

D. Tanks to be installed for the storage of gasoline, diesel fuel or hazardous materials shall be double walled tanks with leak detection systems installed in the institial space between the double walls.

6.2 All tanks shall be pressure tested prior to installation in the excavation as well as after installation and back filling in accordance with the manufacturers requirements.

6.3 All permit application drawings and specifications shall be prepared and stamped by a Professional Engineer.

6.4 All underground facility components shall be designed, constructed, and installed so as to allow a failure determination test of all underground storage tanks and transmission lines without substantial excavation.

6.5 All cathodic protection systems that protect underground tank components shall be tested annually in accordance with methods and standards approved by Connecticut State DEP and the local Fire Marshal's Office. This annual record of voltage output shall be maintained by the owner and/or operator. If any cathodic protection system malfunctions or fails to meet the requirements set by the Fire Marshal's Office it shall be repaired within ten (10) days. It is the responsibility of the owner and/or operator to correct any malfunction of the cathodic protection system and to report it in writing to the local Fire Marshal's Office within ten (10) days.

6.6 No facility installed after the effective date of this ordinance shall remain in service any longer than three (3) years beyond its manufacturers stated life expectancy, unless that facility has been tested annually for any leaks or failure to the accepted standards of State of Connecticut DEP and the local Fire Marshal's Office on an annual basis. If these required tests either fail or are not done, the facility shall be taken out of service and removed from the ground in compliance with the procedures set forth in NFPA 30.

6.7 The installation of any components and the maintenance of all underground components of a new or existing facility shall comply with the standards and procedures set forth in NFPA 30 as well as any local requirements stated by the local Fire Marshal's Office.

6.8 If a manufacturers specifications or recommendations are inconsistent with any section of these Regulations, the more stringent section shall prevail.

6.9 Within 30 days of the completion of the installation of a new facility, the owner and/or operator shall submit to the Building Official and the local Fire Marshal's Office a statement signed by the installer that the installation has been carried out in accordance with this ordinance.

Section 7. Transfer of Ownership

7.1 In the event that an owner and/or operator transfers the ownership of an underground facility he shall make a full written disclosure to the new owner of the status of the facility in relation to these regulations. This disclosure shall take place at least ten (10) days prior to the transfer of

ownership. The owner shall also notify the Building Official and Fire Marshal's Office of the facility ownership transfer as well as all water companies in Town.

Section 8. Records

8.1 The owner of a new or existing facility shall assure the maintenance of up to date records of installation activities, modification, removal or replacement of any underground components or any protective devices for such components as well as any other information required by the Building Official and/or Fire Marshal.

8.2 All records of work completed must be signed, copied and submitted the Fire Marshal's Office within 30 days of the works completion.

8.3 All records required by Section 8 shall be maintained on the site for inspection for the life of the facility.

Section 9. Life Expectancy

9.1 Life Expectancy is defined as follows:

- A. For a fiberglass reinforced plastic facility and components the period of the manufacturers corrosion warranty.
- B. For a cathodically protected facility components that meet the requirements of these Regulations, the period of the manufacturers corrosion warranty or the life expectancy of the existing or replacement anodes as calculated using standard formulas approved by the State
- C. For existing facility components that are not in compliance with these regulations, ten (10) years from the date of installation. If the date of installation cannot be documented, the owner shall show cause why the facility shall not be immediately removed by producing evidence such as Engineering reports documenting the integrity of the facility. Such facilities shall be closed within Five (5) years in accordance with Section 12.

Section 10. Life Expectancy Testing

10.1 The testing to determine if a UST not in compliance with these regulations may remain in place shall be completed within 12 months prior to the end of the documented life expectancy. These existing tank facilities shall undergo testing by an approved means in compliance with NFPA 329. If this test shows that the facility has not failed it shall have its life expectancy extended by one year. It shall be tested on an annual basis thereafter until it is removed. If this test shows that the facility has leaked or otherwise failed it shall be emptied of product within 24 hours and plans shall be submitted for its repair or removal from the ground within two weeks or as directed by DEP.

10.2 Life expectancy testing for new facility components shall be done 12 months prior to the end of its documented life expectancy. At this time the facility components shall undergo testing by an approved means in compliance with NFPA 329. If the facility is found to have no leaks or

deficiencies it shall have its life expectancy extended by one year. It shall be tested annually thereafter until it is removed. If this test shows that the facility has leaked or otherwise failed it shall immediately be emptied of all product within 24 hours, and a plan submitted for its repair or removal from the ground within two weeks or as directed by DEP.

10.3 Written verification of these tests completion shall be submitted to the Fire Marshal's Office and the Building Official within 15 days of the test being done. Failing test results shall be reported to the above authorities by telephone within 24 hours of the test being done.

10.4 No facility, either new or existing, shall have its life expectancy extended by any more than five (5) one year periods.

Section 11. Facility Failures

11.1 Any owner and/or operator who becomes aware or suspects that a leak, spill or failure has occurred at his facility shall immediately notify the Fire Marshal's Office, the Building Official and State DEP as required by Section 22a-450 of the Connecticut General Statutes. This includes any leaking transmission lines, tanks or other components. This information shall include the known or presumed cause for the leak or spill, the known or estimated amount of the leak, the type or name of the product leaked or spilled, and the estimated length of time that the leak or spill was occurring.

11.2 The operator and/or owner shall within 24 hours empty the facility or component in question and take it out of service. The facility shall remain empty and out of service until the defective components are replaced or repaired or removed.

11.3 The owner and/or operator shall arrange testing to be done of any component of the facility that is suspected of failing. Such testing shall be conducted in an approved manner by a company certified to perform this type of work. The results of the test will be provided to the Town and State DEP within 24 hours of its completion.

11.4 All plans to remove or repair the failed facility shall be submitted within two weeks or as directed by DEP.

11.5 The owner or operator of a new or existing facility which discharges, leaks or spills any oil or petroleum product into the environment shall, as part of the repair process, reclaim, recover and properly dispose of the released product and any other substance contaminated by it.

Section 12. Facility Closures

12.1 An owner and operator who wishes to permanently close or temporarily cease operating a UST shall do so only with written approval in advance from the Fire Marshal's Office, Building Official, and State DEP.

12.2 Except for special circumstances approved by the Fire Marshal, Building Official and DEP no facility taken out of service on a permanent basis shall be abandoned in place but rather shall

be removed from the ground. This includes all components of the facility including but not limited to transmission lines, tanks or underground pumps. Facilities closed but not removed from the ground shall be tested for leaks and if free from leaks, shall be cleaned and filled with an inert material.

12.3 The plan for the removal of the components shall be submitted to the Fire Marshal's Office, Building Official and State DEP prior to the date the work is planned to commence. All work shall comply with State DEP regulations, this document, as well as NFPA 30.

12.4 All work being done shall be supervised by a representative of the Fire Marshal's Office, Building Official, or State DEP. This person shall have the authority to order all work stopped in the event that a leak or other contamination is found during the removal process. If contamination is found the procedures outlined in Section 11, as applicable, shall be followed.

12.5 All work done in the removal process shall be done by an approved company licensed or certified to do such work in the State of Connecticut.

12.6 Within 30 days of the completion of the removal work a certification by the company doing the work shall be submitted indicating the scope of work done, problems encountered, and the condition of the site.

12.7 No components, once removed from the ground, shall be reused for petroleum or Hazardous Material liquid storage. The removing company shall present a document to the Fire Marshals Office as part of the closure statement indicating the manner and location of the disposal of the components removed.

Section 13. Penalties for Violations

13.1 Any owner or operator found in violation of any part of these Regulations shall be fined \$100. per day until the violation is corrected. If the violation is found to be the result of an intentional act intended to deceive or mislead the Town or its agents the fine shall be increased to \$1,000. per day.

Section 14. Seperability Clause

14.1 Should any section, paragraph, sentence, clause or phrase of this Regulation be declared unconstitutional or invalid for any reason, the remainder of the document shall not be affected thereby.

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