

## CHAPTER 62-761 UNDERGROUND STORAGE TANK SYSTEMS

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### **62-761.100 Intent.**

(1) The purpose of this Chapter is to provide standards for the registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems that store regulated substances, and to minimize the occurrence and environmental risks of releases and discharges. This Chapter provides standards for underground storage tank systems having individual storage tank capacities greater than 110 gallons.

(2) This Chapter implements the requirements of Chapter 376, Florida Statutes. Final agency action related to the functions that may be carried out by a locally administered program (County) under contract with the Department pursuant to Section 376.3073, F.S., shall be taken by the Department.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Formerly 17-761.100, Amended 9-30-96, 7-13-98, 6-21-04.*

## **62-761.200 Definitions.**

The following words, phrases or terms used in this chapter, unless the context indicates otherwise, shall have the following meaning:

(1) "Ammonia" includes organic amines and inorganic compounds that are liquids at standard temperature and pressure that, when discharged, release free ammonia ( $\text{NH}_3$ ), or ammonium ion ( $\text{NH}_4^+$ ).

(2) "AST" means an aboveground storage tank.

(3) "Bulk product piping" means on-site integral piping with an internal diameter greater than three inches that is utilized for transporting regulated substances.

(4) "Cathodic protection" means a method of preventing corrosion of a metal surface by making that surface the cathode of an electrochemical cell through the use of devices such as galvanic anodes or impressed current.

(5) "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.

(6) "Certified Contractor" means a Pollutant Storage System Contractor certified by the Department of Business and Professional Regulation in accordance with Chapter 489, F.S. Except for the exemptions specified in Chapter 489, F.S., Certified Contractors are not required for activities that do not involve excavating or disturbing the backfill around UST systems. Certified Contractors are the only contractors authorized to perform the following activities for underground pollutant storage tank systems:

(a) Installation of:

1. USTs or integral piping, excluding drop tubes;
2. Overfill protection and spill containment;
3. Secondary containment;
4. Internal release detection devices;
5. Cathodic protection systems; and
6. Dispenser liners when the integral piping is connected or disconnected during the installation of secondary containment.

(b) Removal of tanks or integral piping; and

(c) Internal lining of tanks.

(7) "Chlorine" includes organic and inorganic compounds that are liquids at standard temperature and pressure that, when discharged, may release free chlorine ( $\text{Cl}_2$ ) or chlorides ( $\text{Cl}^-$ ).

(8) "Compatible" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the storage tank system under conditions likely to be encountered in the storage tank system.

(9) "Contamination" or "contaminated" means the presence of regulated substances in surface water, groundwater, soil, sediment, or upon the land, in quantities that result in exceedances of applicable cleanup target levels in Chapter 62-770, F.A.C., where petroleum or petroleum products are present, or water quality standards in Chapter 62-3, 62-302, 62-520, or 62-550, F.A.C.

(10) "Corrosion Professional" means a person who, by reason of 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 components of a storage tank system. Corrosion Professionals shall be accredited or certified by NACE International, or be a professional engineer registered in the State of Florida.

(11) "County" means a locally administered program under contract with the Department to perform compliance verification activities at facilities with storage tank systems.

(12) "Discharge" includes, but is not limited to, any spilling, leaking, seeping, pouring, misapplying, emitting, emptying, or dumping of any regulated substance which occurs and which affects lands and the surface and ground waters of the state.

(13) "Discovery" means:

(a) Either actual knowledge or knowledge of facts that could reasonably lead to actual knowledge of the existence of an incident, discharge, or an unmaintained storage tank system; or

(b) Discovery as specified in the Petroleum Contamination Site Cleanup Criteria subsection 62-770.200(10), F.A.C.

(14) "Dispenser" means a dispensing system that is used to transfer vehicular fuel from a fixed point to a vehicle.

(15) "Dispenser liner" means a liner installed as secondary containment beneath a dispenser to prevent discharges of regulated substances.

(16) "Dispensing system" means equipment that is used to transfer regulated substances from integral piping through a rigid or flexible hose or pipe to another point of use outside of the storage tank system.

(17) "Double-walled" means a storage tank that has an outer tank wall, or integral piping that has an outer wall that provides secondary containment of the primary tank or piping.

(18) "Empty" means all regulated substances have been removed so that no more than one inch in depth or 0.3 percent by weight of total system capacity of regulated substances remains in the storage tank system.

(19) "Existing contamination" means:

(a) The presence of free product or sheen on the groundwater;

(b) The presence of vapor levels in monitoring wells measured in accordance with DEP's "Guidelines for Vapor Monitoring" or by a Flame Ionization Detector or an equivalent instrument in excess of:

1. 500 parts per million total petroleum hydrocarbons for storage tank systems containing gasoline or equivalent petroleum products; or

2. 50 parts per million total petroleum hydrocarbons for storage tank systems containing kerosene, diesel or other equivalent petroleum products;

(c) Results of analytical tests on a groundwater sample that:

1. Exceed the cleanup target levels for petroleum products' contaminants of concern specified in Table I of Chapter 62-777, F.A.C.; or

2. Indicate the presence of a hazardous substance that is not described in subparagraph 62-761.200(19)(c)1., F.A.C., above; or

3. Indicate the presence of a regulated substance that is not described in subparagraph 62-761.200(19)(c)1., F.A.C., above; or

(d) After July 13, 1998, results of analytical tests on a soil sample that:

1. Exceed the lower of direct exposure residential and leachability based on groundwater criteria cleanup target levels for petroleum products' contaminants of concern specified in Table II of Chapter 62-777, F.A.C.; or

2. Indicate the presence of a hazardous substance that is not described in subparagraph 62-761.200(19)(d)1., F.A.C., above; or

3. Indicate the presence of a regulated substance that is not described in subparagraph 62-761.200(19)(d)1., F.A.C., above.

(20) "Facility" means a nonresidential location containing, or that contained, any stationary tank or tanks containing, or that contained regulated substances, and that have, or had, individual capacities greater than 110 gallons for UST systems.

(21) "Free product" means a regulated substance in excess of 0.01 foot in thickness, measured at its thickest point, floating on water, surface water or groundwater.

(22) "Hazardous substances" means those substances defined as hazardous substances in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. No. 96-510, 94 stat. 2767, as amended by the Superfund Amendments and Reauthorization Act of 1986.

(23) "Heating oil" means any petroleum based fuel used in the operation of heating equipment, boilers, or furnaces.

(24) "High viscosity" means a pollutant with a viscosity of 30 centistokes (cSt) and higher at 40 degrees Centigrade.

(25) "Hydraulic lift tank" means a tank that holds hydraulic fluid for a closed-loop mechanical system used to operate lifts, elevators, and other similar devices.

(26) "Hydrostatic test" means a test for a storage tank or storage tank system component that is performed in accordance with this Chapter using equilibrium and the pressure of liquids to test the integrity of the tank or system component.

(27) "Impervious" means:

(a) A synthetic material or another material approved in accordance with subsection 62-761.850(2), F.A.C., that is compatible with the stored regulated substance, and has a permeability rate to the regulated substance stored of  $1 \times 10^{-7}$  cm/sec or less; or

(b) For concrete structures, a material that:

1. Meets the design and construction standards of ACI 350R-89 and ACI 224R-89; or

2. Is applied to the concrete in accordance with NACE International Standard RP0892-92.

(28) "In contact with the soil" means integral piping connected to USTs, or any portion of a tank, that:

(a) Physically touches the soil; or

(b) Is not in direct contact with the soil, and is separated from the soil only by a casing, wrapping, or other material that is not impervious.

(c) Those portions of integral piping that are elevated and that are not in direct contact with the soil are excluded from this definition.

(29) "Incident" is a condition or situation indicating that a discharge may have occurred from a storage tank system.

(30) “In-service” means a storage tank system that is being actively maintained and operated in accordance with this Chapter. Non-compliance with any specific rule within this Chapter does not exclude the system from being considered “in-service.” Subject to the above, a storage tank system is also considered to be in-service if it:

(a) Contains regulated substances or has regulated substances regularly added to or withdrawn from the system;

(b) Is emptied solely for the purpose of cleaning, routine maintenance, or a change in product, for a time period not exceeding 45 days; or

(c) Contains non-regulated substances and is still maintained in an in-service status at the request of the owner or operator.

(31) “Integral piping” means on-site piping, originating or terminating at the regulated storage tank or tanks, that conveys regulated substances. Vapor recovery lines, and vent lines are not considered integral piping. Integral piping includes all valves, elbows, joints, flanges, pumps, and flexible connectors, up to the:

(a) Union of the piping with the dispensing system;

(b) Fill cap or fill valve;

(c) Forwarding pump used for transferring regulated substances to a flow-through process tank or an industrial production or manufacturing point of use; or

(d) First flange or connection within the loading rack containment area.

(32) “Internal lining” means a material that is applied internally on USTs to protect the tank from internal corrosion.

(33) “Interstitial monitoring” is a release detection method that is used to determine the presence of regulated substances or water between the primary and secondary containment. Interstitial monitoring can be performed within:

(a) A closed interstitial space between two steel or impervious barriers that are sealed, not open to the atmosphere, and designed to be tested for a breach of integrity of the interstitial space; or

(b) An open interstitial space between two steel or impervious barriers that are open to the atmosphere, and not designed to be tested for a breach of integrity of the interstitial space.

(34) “Liner” means an impervious material that meets the performance standards of paragraph 62-761.500(1)(d), F.A.C., that is used externally as a method of secondary containment.

(35) “Maintenance” means the normal operational upkeep to prevent a storage tank system from releasing regulated substances.

(36) “Nationally Recognized Laboratory” means an organization that can perform quantitative and qualitative tests on storage tank system equipment, evaluate the test data and equipment performance, and make determinations of the equipment’s capability of meeting the technical standards of this Chapter. A Nationally Recognized Laboratory shall have at least five years of professional storage tank system equipment testing experience. Nationally Recognized Laboratories include organizations such as Underwriter’s Laboratories, Carnegie Mellon Research Institute, Midwest Research Institute, Ken Wilcox Associates, Factory Mutual, and American Board of Engineering and Technology (ABET) Accredited Universities.

(37) “On-site” means on the same or geographically contiguous property as the facility regulated under this Chapter, that is under the same ownership or control, and which may be divided by a public or private right-of-way or an easement.

(38) “Operational life” refers to the period from the start of installation of the storage tank system to the completion of the closure of the storage tank system in accordance with subsection 62-761.800(2), F.A.C.

(39) “Operator” means any person operating a facility, whether by lease, contract, or other form of agreement.

(40) “Out-of-service” means a storage tank system that:

(a) Is designated as an out-of-service system by owner or operator notification to the Department on Form 62-761.900(2);

(b) Is empty as defined in subsection 62-761.200(18), F.A.C.; and

(c) Does not have regulated substances transferred into or withdrawn from the tank as specified in subsection 62-761.800(1), F.A.C., for a maximum time of:

1. Two years of being taken out-of-service for USTs; or

2. Ten years of being taken out-of-service for storage tank systems with secondary containment.

(41) “Overfill” is a release or discharge that occurs when a tank is filled beyond its capacity.

(42) “Owner” means any person as defined in Section 376.301(23), F.S., owning a facility.

(43) “Pesticides” means all preparations, products, and substances included in the Department of Agriculture and Consumer Services’ Rule 5E-2.002, F.A.C.

(44) “Petroleum” includes:

(a) Oil, including crude petroleum oil and other hydrocarbons, regardless of gravity, which are produced at the well in liquid

form by ordinary methods and which are not the result of condensation of gas after it leaves the reservoir; and

(b) All natural gas, including casinghead gas, and all other hydrocarbons not defined as oil in paragraph 62-761.200(44)(a), F.A.C.

(45) "Petroleum product" means any liquid fuel commodity made from petroleum.

(a) Forms of fuel considered to be petroleum products include all fuels known or sold as:

1. Diesel fuel;
2. Kerosene;
3. Gasoline; and
4. Fuels containing mixtures of gasoline and other products.

(b) Forms of fuel excluded from this definition are:

1. Liquefied petroleum gas;
2. American Society for Testing and Materials (ASTM) grades no. 5 and no. 6 residual oils;
3. Bunker C residual oils;
4. Intermediate fuel oils used for marine bunkering with a viscosity of 30 and higher;
5. Asphalt oils; and
6. Petrochemical feedstocks.

(46) "Pipe" or "piping" means any hollow cylindrical or tubular conveyance through which regulated substances flow.

(47) "Piping sump" or "Submersible turbine pump sump" means a liner installed as secondary containment or a monitoring port at the top of a tank or at the lowest point in the integral piping to detect releases.

(48) "Pollutants" includes any "product" as defined in Section 377.19(11), F.S., pesticides, ammonia, chlorine, and derivatives thereof, excluding liquefied petroleum gas.

(49) "Pressure test" means a test to determine the integrity of integral piping performed in accordance with subparagraph 62-761.640(5)(a)1., F.A.C.

(50) "Pressurized piping" means piping through which regulated substances flow due to a pump that is not located at the dispensing system.

(51) "Product" as defined in Section 377.19(11), F.S., means any commodity made from oil or gas and includes refined crude oil, crude tops, topped crude, processed crude petroleum, residue from crude petroleum, cracking stock, uncracked fuel oil, fuel oil, treated crude oil, residuum, gas oil, casinghead gasoline, natural gas gasoline, naphtha, distillate, condensate, gasoline, used oil, kerosene, benzene, wash oil, blended gasoline, lubricating oil, blends or mixtures of oil with one or more liquid products or byproducts derived from oil or gas, and blends or mixtures of two or more liquid products or byproducts derived from oil or gas, whether hereinabove enumerated or not.

(52) "Registered Precision Tank Tester" means a contractor that performs tightness tests on USTs, and small diameter piping connected to USTs, that is registered by the Department of Business and Professional Regulation pursuant to Chapter 489, F.S.

(53) "Regulated substance" means a liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), that is a pollutant or a hazardous substance, or any mixture of the two, when stored in a UST.

(54) "Release" means:

- (a) A discharge; or
- (b) A loss of regulated substances from a storage tank system into the system's secondary containment.

(55) "Release detection" means a method of:

- (a) Determining whether a discharge of regulated substances has occurred; or
- (b) Detecting the presence of regulated substances within a storage tank system's secondary containment.

(56) "Release detection response level" is the point of measurement, calculation, observation, or level that is established for each individual release detection device or method at which an investigation must be initiated to determine if an incident, release, or discharge has occurred.

(57) "Repair" means to restore or replace any defective or damaged parts of a storage tank system. Replacement of a non-defective part is not a repair.

(58) "Residential storage tank system" means a storage tank system that is located on property used primarily for dwelling purposes, and the storage and use of regulated substances in the tank is for residential purposes.

(59) "Secondary containment" means a release detection and prevention system that meets the performance standards of paragraph 62-761.500(1)(d), F.A.C., and includes dispenser liners, piping sumps, double-walled tanks and piping systems, or single-

walled tanks or piping systems that are contained within a liner or an impervious containment area.

(60) "Sheen" means a regulated substance less than or equal to 0.01 foot in thickness, measured at its thickest point, or visibly observed, floating on surface water, groundwater, or within secondary containment.

(61) "Significant loss or gain" means the sum of losses and gains of a regulated substance over a 30 day or monthly period that exceeds:

(a) For tanks with capacities between 111 and 2,000 gallons with an individual flow-through less than 5,000 gallons during the previous 30 days:

1. One percent of the tank capacity; or
2. One percent of the total weekly output; or
3. Fifty gallons, whichever is greatest; or

(b) For tanks with capacities greater than 2000 gallons, or tanks with an individual flow-through exceeding 5,000 gallons during the previous 30 days:

1. One percent of the tank capacity; or
2. One percent of the amount of product dispensed during the previous 30 days, plus 130 gallons, whichever is greatest.

(62) "Small diameter piping" means integral piping with an internal diameter of three inches or less that is utilized for transporting regulated substances.

(63) "Storage tank system" means a tank used to contain regulated substances, its integral piping, and all its components, including dispensing systems, spill containment devices, overfill protection devices, secondary containment systems, and any associated release detection equipment.

(64) "Suction piping" means piping through which regulated substances flow due to a pump located at the dispensing system.

(65) "Tank" means an enclosed stationary container or structure that is designed or used to store regulated substances, and the volume of which, including the volume of underground piping, is ten percent or more buried beneath the surface of the ground.

(66) "Tightness test" means a test for an underground storage tank or its small diameter piping that is performed in accordance with subparagraphs 62-761.640(3)(f)1. and (4)(b), F.A.C., by a precision tank tester registered with the Department of Business and Professional Regulation under Chapter 489, F.S.

(67) "UST" means an underground storage tank.

(68) "UST Category-A system" means a system containing pollutants that was installed on or before June 30, 1992, or a system containing hazardous substances that was installed before January 1, 1991.

(69) "UST Category-B system" means a system containing pollutants that was installed after June 30, 1992, or a system containing hazardous substances that was installed on or after January 1, 1991, and before July 13, 1998.

(70) "UST Category-C system" means a system that was installed on or after July 13, 1998. USTs that are removed and relocated on or after July 13, 1998 are considered Category-C systems.

(71) "Unmaintained" means:

- (a) A storage tank system that was not closed in accordance with Department rules; or
- (b) An out-of-service storage tank system that is not returned to in-service status within:
  1. Two years of its being out-of-service for USTs; or
  2. Ten years of its being out-of-service for storage tank systems with secondary containment.

(72) "Upgrade" means the addition or retrofit of cathodic protection, internal lining, spill prevention, overfill protection, or secondary containment, to a storage tank system, or the installation of single wall corrosion resistant storage tanks, to improve the ability of the storage tank system to prevent discharges of regulated substances.

(73) "Vehicular fuel" means a petroleum product used to fuel motor vehicles, including aircraft, watercraft, and vehicles used on and off roads and rails.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Amended 5-4-92, 3-8-94, Formerly 17-761.200, Amended 9-30-96, 7-13-98, 6-21-04.*

#### **62-761.210 Reference Standards.**

(1) Referenced standards are available for inspection at the County Offices, and the Department of Environmental Protection's District and Tallahassee Offices, and may be obtained from the following sources:

(a) ACI International (American Concrete Institute), Post Office Box 9094, Farmington Hills, Michigan 48333-9094, (248) 848-3700;

- (b) American Petroleum Institute (API), 1220 L Street, N.W. Washington, D.C. 20005, (202) 682-8000;
- (c) ASME International (The American Society of Mechanical Engineers), 22 Law Drive, Box 2300, Fairfield, New Jersey 07007-2300, (800) 843-2763;
- (d) American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Conshohocken, Pennsylvania 19103, (610) 832-9500;
- (e) Florida Department of Environmental Protection (DEP), Storage Tank Regulation Section, 2600 Blair Stone Road, MS 4525, Tallahassee, Florida 32399-2400, (850) 245-8858;
- (f) NACE International (National Association of Corrosion Engineers), Post Office Box 218340, Houston, Texas 77218-8340, (281) 492-0535;
- (g) National Fire Protection Association (NFPA), 1 Battery March Park, Post Office Box 9101, Quincy, Massachusetts 02269-9101, (800) 344-3555;
- (h) National Leak Prevention Association (NLPA), Route 2 Box 106A, Falmouth, Kentucky 41040, (702) 832-2260;
- (i) Petroleum Equipment Institute (PEI), Post Office Box 2380, Tulsa, Oklahoma 74101-2380, (918) 494-9696;
- (j) Society for Protective Coatings (SSPC) 40 24th Street, 6th Floor, Pittsburgh, Pennsylvania 15222-4643, (412) 281-2331;
- (k) Steel Tank Institute (STI), 570 Oakwood Road, Lake Zurich, Illinois 60047, (847) 438-8265;
- (l) Underwriters Laboratories (UL), 333 Pfingsten Road, Northbrook, Illinois 60062-2096, (847) 272-8800; and
- (m) Government Printing Office, Superintendent of Documents, Attention: New Orders, Post Office Box 371954, Pittsburgh, Pennsylvania 15250-7954, (202) 512-1800.

(2) Titles of documents. References to documents listed in paragraphs 62-761.210(2)(a) through (m), F.A.C., below are made throughout this Chapter. Each document or part thereof is adopted and incorporated as a standard only to the extent that it is specifically referenced in this Chapter.

(a) ACI International:

1. ACI 224R-89, "Control of Cracking in Concrete Structures," May, 1990; and
2. ACI 350R-89, "Environmental Engineering Concrete Structures," June, 1990.

(b) American Petroleum Institute Standards:

1. API Standard 570, "Piping Inspection Code: Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems," June, 1993;
2. API Recommended Practice 1110, "Recommended Practice for the Pressure Testing of Liquid Petroleum Pipelines," December, 1991;
3. API Recommended Practice 1604, "Closure of Underground Petroleum Storage Tanks", March, 1996;
4. API Recommended Practice 1615, "Installation of Underground Petroleum Storage Systems," March, 1996;
5. API Recommended Practice 1621, "Bulk Liquid Stock Control at Retail Outlets," May, 1993;
6. API Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," April, 1992;
7. API Recommended Practice 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," May, 1996; and
8. API Recommended Practice 1637, "Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Service Stations and Distribution Terminals," September, 1995.

(c) ASME International: B31.4-1992, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols" January, 1993 with 1994 Addenda.

(d) American Society for Testing and Materials:

1. Specification D4021-92, "Standard Specification for Glass Fiber Reinforced Polyester Underground Petroleum Storage Tanks," October, 1992; and
2. Designation: ES 40-94, "Emergency Standard Practice for Alternative Procedures for the Assessment of Buried Steel Tanks Prior to the Addition of Cathodic Protection," January, 1995.

(e) Florida Department of Environmental Protection:

1. "Storage Tank System Closure Assessment Requirements" April, 1998;
2. "Guidelines for Vapor Monitoring," April, 1998; and
3. "Guidelines for Site-Suitability Determinations for External Monitoring," February, 1998.

(f) NACE International:

1. NACE Standard RP-0169-96, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems,"

September, 1996; and

2. NACE Standard RP-0285-95, "Corrosion Control of Underground Storage Tank Systems by Cathodic Protection," February, 1995.

(g) National Fire Protection Association:

1. NFPA 30, "Flammable and Combustible Liquids Code," August, 1996;

2. NFPA 30A, "Automotive and Marine Service Station Code," August, 1996; and

3. NFPA 329, "Handling Underground Releases of Flammable and Combustible Liquids," Chapters 3, 4, and 5, August, 1992.

(h) National Leak Prevention Association: NLPA Standard 631, "Entry, Cleaning, Interior Inspection, Repair and Lining of Underground Storage Tanks," Chapter B, 1991.

(i) Petroleum Equipment Institute: PEI/RP100-97 "Recommended Practices for Installation of Underground Liquid Storage Systems," 1997.

(j) Society for Protective Coatings: SSPC-TU 2/NACE 6G197, SSPC Publication No. 97-04, "Design, Installation, and Maintenance of Coating Systems for Concrete Used in Secondary Containment," February, 1997.

(k) Steel Tank Institute:

1. STI-P<sub>3</sub><sup>®</sup> "Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks #STI-P<sub>3</sub><sup>®</sup>," April, 1996;

2. STI R892-89, "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems," 1989; and

3. STI ACT-100<sup>®</sup> #F894, "Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks," April, 1996.

(l) Underwriters Laboratories Standards:

1. UL 58, "Steel Underground Tanks for Flammable and Combustible Liquids," December, 1996;

2. UL 567, "Pipe Connectors for Petroleum Products and LP Gas," June, 1996;

3. UL 971, "Non-metallic Underground Piping for Flammable Liquids," October, 1995;

4. UL 1316, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures," January, 1994; and

5. UL 1746, "External Corrosion Protection Systems for Steel Underground Storage Tanks," July, 1993, with Revisions, November, 1997.

(m) Government Printing Office, Code of Federal Regulations:

1. Title 33, Part 154, July 1997;

2. Title 33, Part 156.170, July 1997;

3. Title 40, Part 112, July 1997;

4. Title 40, Part 280, Subpart H, July 1997; and

5. Title 40, Part 302, July 1997.

(3) Applicability of Reference Standards: Unless otherwise specified in this rule, Category-A and Category-B facilities are subject to the Reference Standards listed in the Department's storage tank rules that were in effect at the time of facility construction or operation. Category-C facilities shall comply with subsection 62-761.210(2), F.A.C., on or after July 13, 1998.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Formerly 17-761.210, Amended 7-13-98, 6-21-04.*

### **62-761.300 Applicability.**

(1) General Requirements:

(a) Underground storage tank systems: The requirements of this Chapter, unless specified otherwise, apply to owners and operators of facilities, or owners and operators of UST systems with individual storage tank capacities greater than 110 gallons, that contain or contained:

1. Vehicular fuel, subject to Chapter 17-61, F.A.C., after May 21, 1984;

2. Pollutants or hazardous substances after December 10, 1990; or

3. Regulated substances in unmaintained storage tank systems.

(b) This rule is applicable to non-residential facilities. Under 40 C.F.R. 280, residential tanks greater than 1100 gallons containing motor fuels are subject to federal UST rules (advisory information only-not required by this Chapter).

(2) Exemptions: The following underground systems are exempt from the requirements of this Chapter:

- (a) Any storage tank system storing any hazardous waste listed or identified under Subtitle C of the Resource Conservation and Recovery Act, or a mixture of such hazardous waste and other regulated substances;
- (b) Any storage tank system regulated under the Toxic Substances Control Act (15 U.S.C. 2065);
- (c) Any pesticide waste degradation system regulated under Chapter 62-660, F.A.C.;
- (d) Storage tank systems used solely for temporary storage of mixtures of pesticides and diluent for reapplication as pesticides;
- (e) Any storage tank system with a storage capacity of less than 30,000 gallons used for the sole purpose of storing heating oil for consumptive use on the premises where stored;
- (f) Any tank that contains asphalt or asphalt products not containing other regulated substances;
- (g) Any storage tank system storing regulated substances that are solid or gaseous at standard temperature and pressure;
- (h) Any storage tank containing LP gas;
- (i) Any storage tank system that contains small quantities (de minimus, as per 40 C.F.R. Section 280.10(b)(5)) of regulated substances;
- (j) 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;
- (k) Any septic tank system;
- (l) Any stormwater or wastewater collection system;
- (m) Any surface impoundment, pit, pond, or lagoon;
- (n) Any agricultural storage tank system of 550 gallons capacity or less;
- (o) Any residential storage tank system;
- (p) Any emergency spill or emergency overflow containment storage tank system that is emptied as soon as possible after use, and that routinely remains empty;
- (q) Any flow-through process tank system. For industrial and manufacturing facilities, integral piping is considered to terminate at the forwarding pump or valve used to transfer regulated substances to process, production, or manufacturing points of use or systems within the facility;
- (r) Any storage tank system, liquid trap, or associated gathering lines directly related to oil or gas production and gathering operations regulated by Chapter 377, F.S.;
- (s) Equipment or machinery that contains regulated substances for operational purposes, such as hydraulic lift or fluid tank systems and electrical equipment tank systems;
- (t) Any pipeline facilities;
- (u) Any storage tank system containing radionuclides or that is part of an emergency generator system for nuclear power generation at facilities regulated by the Nuclear Regulatory Commission under 10 C.F.R. Part 50 Appendix A;
- (v) Vapor recovery holding tanks and associated vapor recovery piping systems; or
- (w) Any rail or tanker truck loading or unloading operations (loading racks) specified in Chapter 5 of NFPA 30.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Formerly 17-761.300, Amended 7-13-98, 6-21-04.*

#### **62-761.400 Registration and Financial Responsibility.**

##### **(1) General registration requirements.**

(a) The owner or operator of any facility, or the owner or operator of a storage tank system shall register the storage tank system with the Department on Form 62-761.900(2).

(b) A completed registration form shall be submitted to the Department no later than 30 days after regulated or hazardous substances are put into any new storage tank system.

##### **(2) Registration fees.**

(a) Registration fees are due from the tank or facility owner or operator, as indicated in this section, for all registered storage tank systems except for storage tank systems that have been properly closed in accordance with subsection 62-761.800(2), F.A.C.

(b) A registration fee of \$50.00 per tank or vessel shall be submitted for each initial registration of a storage tank system. The fee shall be paid within 30 days after receipt of an invoice by the Department.

(c) A renewal fee of \$25.00 per tank shall be paid to the Department for each storage tank system not meeting the closure requirements of subsection 62-761.800(2), F.A.C. by July 1 each year.

(d) A replacement fee of \$25.00 per tank shall be paid to the Department for each tank that is replaced for the purpose of facility

upgrading, within 30 days after receipt of an invoice by the Department.

(e) A late fee of \$20.00 per tank shall be paid to the Department for any renewal that is received after July 31.

(f) Each facility shall receive a registration placard upon payment of all applicable fees. The placard shall be displayed in plain view in the office, kiosk, or at another suitable location at the facility where the tank is located.

(3) Financial responsibility.

(a) General requirements.

1. The owner or operator of a facility, or individual tanks, if of different ownership, shall demonstrate financial responsibility to the Department. If the owner and operator of a tank are separate persons, only one person is required to demonstrate financial responsibility. However, both persons are liable in event of noncompliance. Financial responsibility is only required for tanks containing petroleum or petroleum products. Financial responsibility is the ability to pay for corrective action and third-party liability resulting from a discharge at the facility.

2. The demonstration of financial responsibility shall be made by the owner or operator in accordance with C.F.R. Title 40, Part 280, Subpart H.

3. Financial responsibility requirements for petroleum storage systems containing petroleum products may be supplemented by participation in the Florida Petroleum Liability Restoration and Insurance Program to the extent provided by Section 376.3072, F.S.

4. Notwithstanding the owner's or operator's financial responsibility status, the owner or operator may, in accordance with Chapter 376 or 403, F.S., be liable for any discharge at the facility.

(b) The minimum requirements for financial responsibility for USTs containing petroleum or petroleum products shall be the same as provided by C.F.R. Title 40, Part 280, Subpart H.

*Specific Authority 376.303 FS. Law Implemented 376.303, 376.309, 376.3077 FS. History—New 12-10-90, Formerly 17-761.400, Amended 9-30-96, 7-13-98, 6-21-04.*

#### **62-761.450 Notification and Reporting.**

(1) Notification requirements.

(a) Verbal or written notice shall be provided to the County:

1. At least 30 days before installation or upgrading to meet the requirements of Rule 62-761.500, F.A.C., unless the County agrees to a shorter time period;

2. At least 10 days before an internal inspection of a UST, a change in service status, closure, or closure assessment, any of which is performed to meet the requirements of this Chapter;

3. At least 48 hours before:

a. Initiating activities specified in subparagraph 62-761.450(1)(a)1. or 2., F.A.C., above, to confirm the date and time of the scheduled activities;

b. Performing any tightness test required under this Chapter; and

4. Before the close of the County's next business day for an emergency change to an out-of-service status made as required by Rule 62-761.820, F.A.C. Verbal or written notification of the activities specified in subparagraph 62-761.450(1)(a)1. or 2., F.A.C., above performed as a direct result of the emergency change in service shall be made to the County before initiating the activities.

(b) Within 30 days after completion, the owner or operator shall notify the Department of the following items on Storage Tank Registration Form 62-761.900(2):

1. Any change in ownership of a facility or of a storage tank system. Notice of change of ownership shall be provided to the Department by the new owner. The notice shall include a copy of the bill of sale or a letter of acceptance by the new owner;

2. Closure or upgrading of a storage tank system;

3. Any change or correction in the information reported in the registration form, including changes in the type of regulated substances stored. A change within the same blend of regulated substances should not be reported (e.g., regular unleaded to premium unleaded gasoline); and

4. The establishment of, or changes to, the method of demonstrating financial responsibility required by subsection 62-761.400(3), F.A.C.

(c) Within 30 days after installation, replacement, or removal of a storage tank system, the Certified Contractor shall submit a completed Underground Storage Tank System Installation and Removal Form 62-761.900(5) to the County.

(2) Incident notification requirements.

(a) Notification of the discovery of the following incidents shall be made to the County on Incident Notification Form 62-761.900(6) within 24 hours or before the close of the County's next business day:

1. A failed SIR evaluation, or inconclusive SIR evaluations as specified in paragraph 62-761.640(3)(e), F.A.C., or a failed or inconclusive tightness, pressure, or breach of integrity test;
2. Internal inspection results, including perforations, corrosion holes, weld failures, or other similar defects, that indicate that a release could have occurred;
3. Unusual operating conditions, such as the erratic behavior of product dispensing equipment, the sudden loss of product from a storage tank system, or any unexplained presence of water in a tank or unexplained presence of water with or without sheen in a piping sump, unless system equipment is found to be defective but not leaking;
4. The presence of odors of a regulated substance from surface water or groundwater, soil, basements, sewers and utility lines at a facility or in the surrounding area from which it could be reasonably concluded that a release or discharge may have occurred;
5. The loss of a regulated substance from a storage tank system exceeding 100 gallons on impervious surfaces, other than secondary containment, such as driveways, airport runways, or other similar asphalt or concrete surfaces, provided that the loss does not come in contact with pervious surfaces;
6. A positive response of release detection devices or methods described in Rule 62-761.640, F.A.C., or approved under subsection 62-761.850(2), F.A.C. A positive response shall be the indication of a release of regulated substances, an exceedance of the Release Detection Response Level, or a breach of integrity of a storage tank system; and
7. The presence of free product in a piping sump.

(b) Incident Notification Form 62-761.900(6) need not be submitted if:

1. Within 24 hours of discovery of an incident, or before the close of the County's next business day, the investigation of the incident confirms that a discharge did not occur; or
  2. An Incident Notification Form was previously submitted for that incident.
- (3) Discharge reporting requirements.

(a) Upon discovery of an unreported discharge, the owner or operator shall report the following to the County on Discharge Report Form 62-761.900(1) within 24 hours or before the close of the County's next business day:

1. Results, or receipt of results, of analytical or field tests of surface water or groundwater indicating the presence of contamination by:
    - a. A hazardous substance from a UST system;
    - b. A regulated substance, other than petroleum products; or
    - c. Petroleum products' contaminants of concern specified in Table I or II, as applicable, in Chapter 62-777, F.A.C.;
  2. Free product or sheen of a regulated substance, or a regulated substance that is visibly observed in soil, on surface water, in groundwater samples, on basement floors, in subsurface utility conduits or vaults, or in sewer lines at the facility or in the surrounding areas;
  3. A spill or overfill event of a regulated substance to soil or another pervious surface, equal to or exceeding 25 gallons, unless the regulated substance has a more stringent reporting requirements specified in C.F.R. Title 40, Part 302;
  4. Results of analytical or field tests of soil indicating the presence of contamination by:
    - a. A hazardous substance from a UST system;
    - b. A regulated substance, other than petroleum products;
    - c. Petroleum products' contaminants of concern that exceed the lower of direct exposure residential and leachability based on groundwater criteria cleanup target levels specified in Table II in Chapter 62-777, F.A.C., unless due to a spill or overfill event in a quantity less than that described in subparagraph 62-761.450(3)(a)3., F.A.C., above; or
  5. Soils stained by regulated substances that are observed during a closure assessment performed in accordance with subsection 62-761.800(3), F.A.C.
- (b) Copies of analytical or field test results that confirm a discharge shall be submitted to the County with Discharge Report Form 62-761.900(1).
- (c) A request for a retraction of a submitted Discharge Report Form may be submitted to the County or the Department if evidence is presented that a discharge did not occur at the facility.
- (d) A Discharge Report Form 62-761.900(1) does not need to be submitted for previously reported discharges.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Formerly 17-761.450, Amended 9-30-96, 7-13-98, 6-21-04.*

### **62-761.500 Performance Standards for Category C Storage Tank Systems.**

(1) General performance standards. UST Category-C systems shall be constructed and installed in accordance with the requirements of this section. UST Category-C systems shall be made of, or internally lined with, materials that are compatible with the regulated substance stored in the system. The following requirements are applicable to UST systems:

(a) Siting. Persons are advised that, pursuant to paragraphs 62-521.400(1)(l)-(n) and subsection (2), F.A.C., no storage tank shall be installed within 500 feet of any existing community water supply system or any existing non-transient non-community water supply system. No Category-C system shall be installed within 100 feet of any other existing potable water supply well. These prohibitions shall not apply to the replacement of an existing storage tank system within the same excavation or the addition of new storage systems meeting the standards for Category-C systems at an existing facility.

(b) Spill containment. USTs shall be installed with a spill containment system at each tank fill connection. The spill containment system shall be a fixed component that is designed to prevent a discharge of regulated substances when the transfer hose or pipe is detached from the tank fill pipe. The spill containment system shall meet the requirements of paragraph 62-761.500(1)(d), F.A.C.

(c) Dispensing systems.

1. The dispensing system used for transferring fuels from storage tanks shall be installed and maintained in accordance with the provisions of NFPA 30 and Chapters 2, 4 and 9 of NFPA 30A.

2. Dispensers shall be designed, constructed, and maintained to provide access for examination and removal of collected product and accumulated water from dispenser liners.

(d) Secondary containment.

1. The materials used for secondary containment shall be:

a. Impervious to the regulated substance and able to withstand deterioration from external environmental conditions;

b. Non-corrosive or of corrosion-protected materials;

c. Capable of containing regulated substances for at least 30 days; and

d. Of sufficient thickness and strength to withstand hydrostatic forces at maximum capacity to prevent a discharge during its operating life.

2. Liners, unless previously approved by the Department, shall be approved by the Department in accordance with subsection 62-761.850(2), F.A.C. Liners shall not be constructed or consist of naturally occurring in-situ soils.

3. Secondary containment constructed of concrete shall be:

a. Designed and constructed in accordance with ACI 350R-89 and ACI 224R-89; or

b. Designed, evaluated, and certified by a professional engineer registered in the State of Florida that the concrete secondary containment system meets the General Construction Requirements specified in subparagraph 62-761.500(1)(d)1., F.A.C.

4. For cathodically protected tanks and integral piping, secondary containment systems shall not interfere with the operation of the cathodic protection system.

5. Storage tank system equipment with closed interstitial spaces, such as double-walled USTs and double-walled integral piping in contact with the soil that is connected to USTs, shall be designed, constructed and installed to allow for the detection of a breach of integrity in the inner or outer wall by the monitoring of the interstitial space in accordance with paragraph 62-761.640(3)(a), F.A.C. A breach of integrity test shall be performed before the storage tank system is put into service.

6. Secondary containment systems shall be designed and installed to direct any release to a monitoring point or points.

7. Airport and seaport hydrant pits. Underground hydrant pits shall be installed with a spill catchment basin, secondary containment, or other spill prevention equipment to prevent the discharge of pollutants during fueling of aircraft, vessels, or at any other time the hydrant system is in use. Any such equipment shall be sealed to and around the hydrant piping with an impervious, compatible material.

8. Field-fabricated dispenser liners and piping sumps installed before July 13, 1998 do not have to be approved in accordance with Rule 62-761.850, F.A.C.

(e) Cathodic protection.

1. Test stations. Cathodic protection systems shall be designed, constructed, and installed with at least one test station or method of monitoring to allow for a determination of current operating status. Cathodic protection test stations shall provide direct access to the soil electrolyte in close proximity to each cathodically protected structure for placement of reference electrodes, and monitoring wires that connect directly to cathodically protected structures. Facilities where direct access to soil in close proximity to cathodically protected structures is present, and where electrical connections to cathodically protected structures can be

conveniently accomplished, need not have separate dedicated cathodic protection test stations.

2. The cathodic protection system shall be operated and maintained in accordance with paragraph 62-761.700(1)(b), F.A.C.

3. Any field-installed cathodic protection system shall be designed by a Corrosion Professional.

(f) Relocation of USTs. Tanks that have been removed and that are to be reinstalled at a different location shall:

1. Be recertified that all original warranties are confirmed by the original manufacturer or the manufacturer's successor, and be reinstalled in accordance with the standards in Rule 62-761.500, F.A.C., that were in effect on July 13, 1998; or

2. Be recertified by a professional engineer registered in the State of Florida that the UST meets all applicable standards of Rule 62-761.500, F.A.C., in effect on July 13, 1998; and

3. Proof of recertification shall be provided to the Department and County prior to the completion of installation. The provisions of subsection 62-761.850(2), F.A.C., do not apply to the requirements of this subparagraph.

(g) Reuse of storage tanks. Unless it is recertified for use by a professional engineer registered in the State of Florida, or is recertified by the manufacturer, and is brought into service in accordance with Rule 62-761.500, F.A.C.:

1. A UST can not be used or reused as an AST for the storage of regulated substances; and

2. An AST can not be used or reused as a UST for the storage of regulated substances.

(2) Installation.

(a) All components of a storage tank system shall be installed in accordance with the manufacturer's instructions.

(b) All storage tank systems shall be installed according to the applicable provisions of NFPA 30 and 30A, PEI/RP100-97, and API RP 1615.

(c) A Certified Contractor shall perform the installation of storage tank systems containing pollutants, including tanks, integral piping (excluding drop tubes), overflow protection and spill containment equipment, internal release detection equipment, cathodic protection systems, secondary containment systems, and dispensing systems, if the installation of the storage tank system component disturbs the backfill, or where the integral piping is connected or disconnected during installation.

(d) A tightness test shall be performed on the tank and integral piping before any storage tank system is placed into service unless the system's equipment approval specifies otherwise.

(3) Tank construction standards.

(a) Fiberglass reinforced plastic tanks shall be constructed in accordance with UL 1316 and ASTM Standard D4021-86, or certified by a nationally recognized laboratory that these standards are met.

(b) Cathodically protected steel tanks shall be:

1. Constructed in accordance with UL 58 and UL 1746, or as applicable;

2. Constructed in accordance with STI #STI-P<sub>3</sub><sup>®</sup> Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks; or

3. Certified by a Nationally Recognized Laboratory that these standards are met, and constructed and designed by a corrosion professional in accordance with NACE International Standard RP0285-95 for any field-installed cathodic protection system.

(c) Steel tanks coated with a fiberglass reinforced plastic composite shall be constructed in accordance with UL-58 and either UL 1746, STI ACT 100<sup>®</sup> (F894), or certified by a nationally recognized laboratory that one of these standards is met.

(d) Storage tanks constructed of any other material, design, or corrosion protection shall be approved by the Department in accordance with subsection 62-761.850(2), F.A.C.

(e) Any new tank manufactured with previously used or remanufactured components shall be certified before being installed as meeting the applicable standards by Underwriters Laboratory, by a comparable certified product testing laboratory, or by a professional engineer registered in the State of Florida.

(f) Tanks shall be constructed or installed to provide for interstitial monitoring.

(4) Secondary containment. All tanks installed or constructed at a facility after July 13, 1998 shall have secondary containment.

(5) Overflow protection.

(a) At a minimum, fillbox covers shall be marked in accordance with API RP 1637, or with an equivalent method approved by the Department in accordance with subsection 62-761.850(2), F.A.C.

(b) USTs shall be equipped with a system that either:

1. Automatically shuts off flow to the tank when the tank is no more than 95% full;

2. Restricts flow to the tank when the tank is no more than 90% full;

3. Alerts the transfer operator when the tank is no more than 90% full by triggering a high level alarm;

4. Alerts the transfer operator with a high level alarm set at 400 gallons below tank top, but no less than one minute before

overflowing; or

5. Automatically shuts off flow into the tank so that none of the fittings located on top of the tank are exposed to product due to overflowing.

(6) Dispenser liners.

(a) Storage tank systems installed or replaced after July 13, 1998, shall be installed with liners meeting the performance standards of paragraph 62-761.500(1)(d), F.A.C., beneath the union of the piping and the dispenser.

(b) Hydrostatic tests shall be performed for all dispenser liners before placing the system into service. The duration of the tests shall be at least:

1. Twenty-four hours for field-fabricated dispenser liners; or
2. Three hours for factory-made dispenser liners.

(c) Dispenser liners shall be installed to allow for interstitial monitoring in accordance with paragraph 62-761.640(3)(a), F.A.C.

(7) Piping sumps.

(a) Piping sumps installed after July 13, 1998, shall meet the performance standards of paragraph 62-761.500(1)(d), F.A.C. The sumps shall be designed, constructed, and installed to minimize water entering the sump.

(b) Hydrostatic tests shall be performed for all piping sumps before placing the system into service. The duration of the tests shall be at least:

1. Twenty-four hours for field-fabricated piping sumps; or
2. Three hours for factory-made piping sumps.

(c) Piping sumps shall be installed to allow for interstitial monitoring in accordance with paragraph 62-761.640(3)(a), F.A.C.

(8) Integral piping for underground storage tank systems.

(a) Installation.

1. All integral piping shall be installed in accordance with the manufacturer's instructions, if applicable.

2. All integral piping shall be installed according to the applicable provisions of NFPA 30, NFPA 30A, and ASME B31.4.

3. A pressure test shall be performed for underground bulk product piping before the piping system is placed into service. Tightness tests for underground small diameter piping connected to USTs are subject to paragraph 62-761.500(2)(d), F.A.C.

4. All piping that is not in contact with the soil, installed after July 13, 1998, shall meet the construction standards in paragraphs 62-761.500(8)(a)-(d), F.A.C.

(b) Integral piping construction standards.

1. Fiberglass reinforced plastic piping or other non-metallic piping installed at a facility shall be listed with UL 971, UL 567, certified by a Nationally Recognized Laboratory that these standards are met, or approved in accordance with subparagraph 62-761.500(8)(b)3., F.A.C.

2. Coated steel piping shall be constructed in accordance with ASME B31.4. Integral piping in contact with the soil shall be cathodically protected in accordance with API RP 1632, NACE International RP-0169-96, and STI R892-96.

3. Integral piping constructed of other materials, design, or corrosion protection shall be approved by the Department in accordance with subsection 62-761.850(2), F.A.C.

(c) Small diameter piping.

1. Pressurized small diameter piping systems connected to dispensers shall be installed with shear valves or emergency shutoff valves in accordance with NFPA 30A, Section 4-3.6, if applicable. These valves shall be designed to close automatically if a dispenser is dislodged from the integral piping. The valves shall be rigidly anchored independently of the dispenser. For underground small diameter piping, the valves shall be checked at the time of installation by a certified contractor to confirm that the automatic closing function of the valve operates properly and that the valve is properly anchored.

2. Gravity-fed small diameter integral piping systems must be installed with an isolation valve at the point of connection to the storage tank to prevent the discharge of regulated substances in the case of piping failure. The valve shall meet the standards of NFPA 30A, Section 2-1.7.

3. Swing-joints shall not be installed.

(d) Bulk product piping. Bulk product piping shall be constructed and installed in accordance with NFPA 30, and ASME B31.4.

(e) Secondary containment.

1. Small diameter integral piping that is in contact with the soil or that transports regulated substances over surface waters of the state shall have secondary containment.

2. Bulk product piping that is in contact with the soil shall have secondary containment.

3. Remote fill piping that is in contact with the soil shall have secondary containment.

4. The following integral piping systems are exempt from the requirements for secondary containment:

- a. Integral piping that is in contact with the soil, and that is connected to storage tanks containing high viscosity regulated substances; and
- b. Vertical fill pipes equipped with a drop tube.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History--New 12-10-90, Amended 5-4-92, Formerly 17-761.500, Amended 9-30-96, 7-13-98, , 6-21-04.*

**62-761.510 Performance Standards for Category-A and Category-B Storage Tank Systems.**

(1) General. This section provides deadlines for Category-A and Category-B storage tank systems to meet the standards for Category-C storage tank systems in accordance with Rule 62-761.500, F.A.C.

(a) Installation:

1. Installation shall be completed by the deadlines specified in Table UST. However, if installation or upgrade activities are initiated before the deadlines, work can continue after the deadlines, provided that all work is completed within 90 days of:

- a. Contract execution; or
- b. Receipt of construction approval or permits.

2. Installation is considered to have begun if:

- a. All federal, state, and local approvals or permits have been obtained or applied for to begin physical construction for installation of the system; or
- b. Contractual obligations have been made for installation of the system which cannot be cancelled or modified without substantial economic loss, provided that such obligations are pursued diligently in good faith to achieve the requirements of this rule.

(b) By December 31, 1998:

1. All pressurized small diameter piping systems connected to dispensers shall have shear valves or emergency shutoff valves installed in accordance with paragraph 62-761.500(8)(c), F.A.C.
2. Cathodic protection test stations shall be installed in accordance with subparagraphs 62-761.500(1)(e)1. and (2)(b)2., F.A.C., for cathodically protected UST systems without test stations.
3. Fillboxes shall be color coded in accordance with paragraph 62-761.500(5)(a), F.A.C.
4. ASTs that have been reinstalled as USTs, shall meet the requirements of Rule 62-761.500, F.A.C.

(c) After July 13, 1998, a closure assessment shall be performed in accordance with subsection 62-761.800(3), F.A.C., before the installation of dispenser liners, piping sumps, or secondary containment of tanks and integral piping.

(d) Valves meeting the requirements of Section 2-1.7 of NFPA 30A, shall be installed by January 13, 1999 on any storage tank system located at an elevation that produces a gravity head on the dispenser or on small diameter piping.

(e) Small diameter piping transporting regulated substances over surface waters of the state shall have secondary containment by December 31, 2004.

(2) UST Category-A single-walled tanks or underground single-walled piping shall be considered to be protected from corrosion if the tank or piping was constructed with corrosion resistant materials, initially installed with cathodic protection, or had cathodic protection or internal lining installed before June 30, 1992.

(3) UST Category-B systems.

(a) All tanks containing pollutants, installed or constructed at a facility after June 30, 1992, shall have secondary containment.

(b) All tanks containing hazardous substances, installed or constructed at a facility after January 1, 1991, shall have secondary containment.

(4) Small diameter integral piping in contact with the soil that is connected to UST systems shall have secondary containment if installed after December 10, 1990.

(5) By December 31 of the appropriate year shown in Table UST below, all storage tank systems shall meet the performance standards of Rule 62-761.500, F.A.C., or be permanently closed in accordance with subsection 62-761.800(2), F.A.C.

TABLE UST

Year Tank or Integral Piping Installed	1989	1992	1995	1998	2004	2009
+Before 1970	O	B		ACFL	D	E
+1970-1975		SBL		ACF	D	E
+1976-1980		B	SL	ACF	D	E
+1981-09/01/84		B		ACFL	D	E
+09/02/84-06/30/92		B		ACFL	D	E
+Other*		B		ACFL	D	E

Key to Table UST

\* = All systems with a capacity of between 110 gallons and 550 gallons, all marine fueling facilities as defined in Section 376.031, F.S., and those systems of greater than 550 gallon capacity that use less than 1,000 gallons per month or 10,000 gallons per year.

A =

(1) Small diameter piping that was protected from corrosion by June 30, 1992, shall have:

(a) For pressurized piping, line leak detectors with automatic shutoff, or flow restriction in accordance with paragraph 62-761.640(4)(a), F.A.C.; or

(b) For suction integral piping:

1. Secondary containment in accordance with paragraph 62-761.500(1)(d), F.A.C.;
2. A single check valve installed in accordance with subparagraph 62-761.610(3)(a)3., F.A.C.;
3. An annual line tightness test in accordance with subparagraph 62-761.610(3)(a)1., F.A.C.;
4. External monthly monitoring or release detection in accordance with sub-subparagraph 62-761.610(3)(a)1.b., F.A.C.

(2) Bulk product piping in contact with soil shall be upgraded with secondary containment unless the piping is:

(a) Constructed of corrosion resistant materials or upgraded with cathodic protection; and

(b) Tested on an annual basis in accordance with API RP 1110, ASME B31.4, or an equivalent method approved by the Department in accordance with Rule 62-761.850, F.A.C.

B = Vehicular fuel petroleum storage tank systems shall be upgraded with spill containment.

C = Secondary containment in accordance with paragraph 62-761.500(1)(d), F.A.C., shall be required for the following:

- (1) Concrete storage tanks;
- (2) Hazardous substance storage tank systems; and
- (3) For pollutant storage tank systems, the storage tank or small diameter piping not protected from corrosion by June 30, 1992.

D = (1) Secondary containment shall be installed for small diameter piping extending over surface waters.

(2) Secondary containment for remote fill-pipes associated with Category-A and Category-B systems.

E = Pollutant storage tanks and small diameter piping protected from corrosion on or before June 30, 1992, and all manifolded piping, shall be upgraded with secondary containment.

F = (1) Storage tank systems, excluding vehicular fuel petroleum storage tank systems, shall be upgraded with spill containment, dispenser liners (as applicable), and overfill protection.

(2) Unless contained within secondary containment, swing-joints and flex-connectors that are not protected from corrosion shall be protected from corrosion. Facilities that have pressurized small diameter piping and that have not met the foregoing standard on or before July 13, 1998 shall protect the submersible turbine pump from corrosion or provide corrosion protection for the submersible turbine pump if the pump is not installed within secondary containment. Corrosion protection is not required for the submersible turbine pump riser.

L = (1) Category-A USTs and their integral piping systems that contain vehicular fuel, and that are not protected from corrosion, shall have secondary containment, or be upgraded with secondary containment in accordance with Rule 62-761.500, F.A.C.

(2) Dispenser liners and overfill protection equipment shall be installed at UST Category-A systems containing vehicular fuel.

O = UST Category-A vehicular fuel storage tank systems subject to Chapter 17-61, F.A.C., (1984), shall be retrofitted for

corrosion protection.

S = Secondary containment for storage tanks and integral piping not protected from corrosion.

*Specific Authority 376.303 FS. Law Implemented 376.303-.3072 FS. History--New 12-10-90, Amended 5-4-92, Formerly 17-761.510, Amended 9-30-96, 7-13-98, 6-21-04.*

**62-761.600 Release Detection Standards.**

(1) General.

(a) Storage tank systems shall have a method, or combination of methods, of release detection that:

1. Can detect a new release from any portion of the storage tank system;

2. Is installed, calibrated, operated and maintained in accordance with the manufacturer’s instructions, including routine maintenance and service checks for operability to ensure that the device is functioning as designed; and

3. Meets the applicable performance standards in Rule 62-761.640, F.A.C. All manufacturer’s instructions, and the performance claims and their manner of determination described in writing by the equipment manufacturer or installer shall be retained for as long as the storage tank system is used.

(b) A release detection response level shall be described in writing for each method or combination of methods of release detection used for a storage tank system.

(c) A release detection method shall be established and provided for all storage tank systems upon installation.

(d) Except as otherwise specified in Rules 62-761.600-.640, F.A.C., the release detection method or combination of methods used at a facility shall be performed at least once a month, but not exceeding 35 days, to determine if a release from the storage tank system has occurred.

(e) At least once a month, but not exceeding 35 days, any storage tank and component of a storage tank that can be inspected visually shall be visually inspected in accordance with paragraph 62-761.640(2)(e), F.A.C. A visual inspection is not required for any system component that has a continuous or monthly electronic release detection sensor. Continuous electronic leak detection devices shall be inspected for proper operation on a monthly basis. Inspection may consist of visual observation or remote verification of proper operation.

(f) A site suitability determination shall be performed for UST systems by December 31, 1998, in accordance with paragraphs 62-761.640(2)(a)-(d), F.A.C., for storage tank systems using groundwater or vapor monitoring wells for release detection. If the site suitability determination indicates that on-site conditions are unsuitable for external monitoring, another method of release detection must be used.

(g) Vapor monitoring plans shall be performed by December 31, 1998, for UST systems, in accordance with paragraph 62-761.640(2)(d), F.A.C., for storage tank systems using vapor monitoring for release detection.

(h) Any component of a storage tank system with secondary containment shall have an interstitial monitoring method meeting the requirements of paragraph 62-761.640(3)(a), F.A.C.

(i) Pressurized piping, excluding bulk product piping, shall be equipped with a line leak detector that meets the standards of paragraph 62-761.640(4)(a), F.A.C. Gravity piping systems are exempt from this requirement.

(j) Any storage tank system not provided with a method, or combination of methods, of release detection in accordance with this section, shall be closed in accordance with subsection 62-761.800(2), F.A.C., by the date upon which release detection is to be provided.

(k) Groundwater and vapor monitoring wells meeting the standards for external monitoring specified in paragraphs 62-761.640(2)(a)-(d), F.A.C., that are no longer used for release detection, shall be closed in accordance with subsection 62-532.500(4), F.A.C., by December 31, 2010. Wells not meeting these standards shall be closed in accordance with subsection 62-532.500(4), F.A.C., by December 31, 1998, unless the wells are:

1. Used for contamination assessment purposes as specified in paragraph 62-761.600(2)(d), F.A.C.; or

2. Required by rules adopted by a County government in accordance with Section 376.317, F.S.

(2) By December 10, 1990, vehicular fuel petroleum storage tank systems of greater than 550 gallon capacity shall be provided with release detection. Release detection for all other storage tank and integral piping systems in contact with the soil shall be provided by December 31 of the year shown in Table RD.

TABLE RD

Year Storage Tank System	Year Release	Detection Required
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Installed Before 1970 or unknown	1990 P/RD	1991	1992	1993
1970-1974	P	RD		
1975-1979	P		RD	
1980-1990	P			RD

P = Installation of Release Detection for Pressurized Piping

RD = Installation of Release Detection for Tanks and Suction Piping.

(3) Effective December 31 of the applicable year specified under the schedule in Table RD, any groundwater monitoring plan or spill prevention control and countermeasure plan implemented before December 22, 1990, shall be capable of detecting the leak rate or quantity specified in paragraph 62-761.640(1)(a), F.A.C.

(4) UST systems that store fuel solely for use by emergency power generators are not required to comply with the release detection standards of Rules 62-761.600 through 62-761.640, F.A.C.

(5) Monitoring wells shall meet the standards of subsection 62-761.640(2), F.A.C., by December 31, 1998. Wells that do not meet these standards shall be closed in accordance with subsection 62-532.500(4), F.A.C., by December 31, 1998, unless the wells are required by a rule that was adopted by a County government in accordance with Section 376.317, F.S. However, if a monitoring well is used solely for the purpose of monitoring petroleum contamination in accordance with Chapter 62-770, F.A.C., the well does not have to be closed until the completion of the site rehabilitation pursuant to Chapter 62-770, F.A.C. Covers of leak detection monitoring wells redesignated as site assessment wells by the facility owner or operator shall be colored black with a white circle within the black background. The diameter of the white circle shall be approximately one half the diameter of the manhole cover, or approximately four inches.

*Specific Authority 376.303 FS. Law Implemented 376.303, 376.3072 FS. History--New 12-10-90, Formerly 17-761.600, Amended 7-13-98, 6-21-04.*

#### **62-761.610 Release Detection Methods.**

(1) General.

(a) Category-A and Category-B systems. Release detection methods shall be one of the methods specified in this section, and shall meet the performance standards contained in Rule 62-761.640, F.A.C.

(b) Category-C systems. Release detection methods shall be either interstitial or visual monitoring of secondary containment in accordance with Rule 62-761.640, F.A.C. Small diameter pressurized piping shall have a line leak detector in accordance with paragraph 62-761.640(4)(a), F.A.C. A breach of integrity test shall be performed every five years for Category-C storage tank systems with closed interstitial spaces, unless the test is a continuous test.

(2) Category-A and Category-B USTs shall be equipped with one or more of the following release detection systems:

(a) An interstitial monitoring system between the walls of a double-walled tank;

(b) Interstitial monitoring involving a single monitoring well or vapor detector located within a liner that meets the standards in paragraph 62-761.500(1)(d), F.A.C., provided the well or detector is placed at the low point of the liner so that collected liquids will drain to the monitoring point;

(c) A continuously operating release detection system placed around a tank in an excavation or in the secondary containment in accordance with the manufacturer's requirements;

(d) A network of groundwater or vapor monitoring wells installed or verified in accordance with paragraphs 62-761.640(2)(a)-(d), F.A.C., as applicable;

(e) Automatic tank gauge systems.

1. An automatic tank gauge system with a tightness test of the storage tank every three years;

2. A continuous automatic tank gauge system;

(f) A statistical inventory reconciliation system with a tightness test of the storage tank every three years;

(g) Manual tank gauging shall be performed as specified in Table MTG in paragraph 62-761.640(3)(c), F.A.C., for tanks of 550 gallons or less nominal capacity, and for tanks 551-1000 gallons with known diameters of 48 or 64 inches;

(h) Manual tank gauging may be used for tanks of 551 to 2000 gallons nominal capacity provided that a tank tightness test is performed:

1. Every 12 months for tanks not protected from corrosion by June 30, 1992; or  
2. Every five years for tanks installed with corrosion protection, or for tanks upgraded with corrosion protection by June 30, 1992. However, this method is only available for the first 10 years after:

- a. A tank is upgraded with cathodic protection;
- b. A single-walled corrosion-protected tank is installed; or
- c. Until December 22, 1998, whichever is later;

(i) An annual tank test in conjunction with inventory control performed in accordance with Rule 62-761.640, F.A.C. This method can only be used until:

- 1. Ten years after the date of installation of a single-walled corrosion protected tank;
- 2. Ten years after the tank is upgraded with corrosion protection or internal lining; or
- 3. December 22, 1998, whichever is later.

(3) Integral piping.

(a) Small diameter piping in contact with the soil. Single-walled piping that is in contact with soil shall be equipped with one of the following release detection systems:

1. Suction or gravity piping shall have:

- a. An annual line tightness test; or
- b. An external monthly monitoring or release detection method meeting the requirements of subsection 62-761.640(2), F.A.C., if designed to detect a discharge from any portion of the integral piping.

2. By December 31, 1998, pressurized piping shall have:

- a. Mechanical line leak detectors meeting the requirements of paragraph 62-761.640(4)(a), F.A.C., and either an annual line tightness test, or an external release detection method meeting the requirements of paragraphs 62-761.640(2)(a)-(d), F.A.C.; or
- b. Electronic line leak detectors meeting the requirements of paragraph 62-761.640(1)(a), F.A.C.

3. Exemptions. Release detection is not required for piping associated with:

a. Suction pumps, provided that a single check valve is installed directly below the suction pump, and the piping is sloped so that the contents of the pipe will drain back to the tank if the suction is broken. Written verification shall be provided by a certified contractor that no other check valves exist between the dispenser and the tank, and that the above criteria are met. Any subsequent modification of the piping which involves disconnection shall be recertified by a Certified Contractor that these conditions are still being met; and

b. Manifold piping systems.

(b) Small diameter piping not in contact with the soil, or that is exempt from secondary containment. These systems shall be visually inspected in accordance with paragraph 62-761.640(2)(e), F.A.C.

(c) Small diameter piping with secondary containment that is in contact with the soil. Double-walled piping, or single-walled piping with secondary containment shall be equipped with the following release detection systems:

1. Interstitial monitoring;

2. A method of testing for a breach of integrity that meets the requirements of subparagraph 62-761.640(3)(a)2., F.A.C., for Category-C systems, as applicable; and

3. A line leak detector that restricts or shuts off flow or a continuously operating interstitial monitoring device that meets the requirements of subparagraph 62-761.640(4)(a)5., F.A.C., for pressurized piping connected to a UST, by December 31, 1998.

(d) Bulk product and hydrant piping.

1. Single-walled piping in contact with the soil:

a. Shall be pressure tested annually in accordance with paragraph 62-761.640(5)(a), F.A.C.; or

b. Instead of annual testing, a monthly release detection system meeting the requirements of subsection 62-761.640(2) F.A.C., may be installed.

2. Piping not in contact with the soil, or that is exempt from secondary containment, shall be visually inspected in accordance with paragraph 62-761.640(2)(e), F.A.C.

3. Piping with secondary containment that is in contact with the soil, such as double-walled piping or single-walled piping with secondary containment, shall be equipped with the following release detection systems:

a. Interstitial monitoring; and, if applicable,

b. For Category-C systems, a method of testing for a breach of integrity that meets the requirements of subparagraph 62-761.640(3)(a)2., F.A.C., for piping with closed interstitial spaces.

**62-761.640 Performance Standards for Release Detection Methods.**

(1) General. Methods of release detection shall:

(a) Be capable of detecting a release of 0.2 gallons per hour or 150 gallons within 30 days with a probability of detection of 0.95, and a probability of false alarm of 0.05, with the exception of:

1. Tightness testing requirements in paragraph 62-761.640(3)(f) and subparagraph (4)(b)2., F.A.C.;
2. Visual inspections in paragraph 62-761.640(2)(e), F.A.C.;
3. Groundwater or vapor monitoring in subsection 62-761.640(2), F.A.C.; and
4. Manual tank gauging in paragraph 62-761.640(3)(c), F.A.C.

(b) With the exception of bailers and monitoring wells, be approved in accordance with subsection 62-761.850(2), F.A.C.

(c) Have a release detection response level described in writing for each method or combination of methods.

(2) External release detection methods.

(a) Well construction standards.

1. Monitoring well requirements. Monitoring wells shall be constructed and installed by a licensed water well contractor when required by Chapter 62-531, F.A.C. Monitoring wells shall:

- a. Be a minimum of two inches in interior diameter;
- b. Be slotted from the bottom to two feet below ground surface;
- c. Have a minimum slot size of 0.010 inch;
- d. Be backfilled with clean sand or a gravel filter pack to prevent blockage of the slots;
- e. Be constructed of at least schedule 40 PVC without any joints, or of another corrosion protected material;
- f. Be grouted into the borehole from the surface to the top of the filter pack plug with neat cement grout or other equivalent materials. Grouting shall not extend below the top of the well slotting. Bentonite slurry grouts shall not be used;
- g. Unless the monitoring well has an extended exterior casing, be equipped with a minimum six inch diameter manhole designed to prevent water intrusion with a one inch minimum grade increase above the surrounding surface. The well opening shall extend at least one inch above the bottom of the manhole;

h. Be equipped with a watertight cap. The well shall be kept locked or secured to prevent tampering at all times except when the monitoring well is being sampled or maintained. Monitoring wells shall be marked in accordance with API RP 1615;

i. Extend no deeper than 20 feet below ground surface. If such a depth penetrates a confining layer below the excavation, the monitoring well shall extend no deeper than to within six inches of the confining layer. Any well that penetrates a confining layer shall immediately be properly abandoned in accordance with Rule 62-532.500, F.A.C.; and

j. If installed within a secondary containment liner system, extend no deeper than six inches from the liner.

2. Groundwater monitoring wells shall:

- a. Extend at least five feet below the normal groundwater surface level; and
  - b. Be properly developed by the licensed water well contractor before the initial sampling.
3. Vapor monitoring wells shall meet the requirements specified in DEP's "Guidelines for Vapor Monitoring."
4. Electronic sensors, probes, or fiber-optic systems shall be tested at least annually to verify that they operate in accordance with the Department's approval given pursuant to subsection 62-761.850(2), F.A.C.

5. Groundwater and vapor monitoring wells using the placement of sensors or probes in vertical, horizontal, or directionally-drilled wells shall be designed and installed in accordance with the equipment approval for that system granted in subsection 62-761.850(2), F.A.C.

(b) Site suitability determinations.

1. A site suitability determination shall be performed for each facility using groundwater or vapor monitoring. The site suitability determination shall be performed in accordance with DEP's "Guidelines for Site Suitability Determinations for External Monitoring" by a Professional Geologist registered in the State of Florida. If the site is not suitable for external monitoring, another method of release detection must be used.

2. The following facilities having Category-A and Category-B USTs are not required to perform site suitability determinations:

- a. Facilities located in counties having rules more stringent than the Department as specified in Chapter 376.317, F.S.
- b. Facilities with monitoring wells located in the tank excavation, provided that a demonstration can be made that the excavation contains sand or gravel backfill, and the wells were properly constructed and installed within the backfill.

(c) Groundwater monitoring.

1. The regulated substance shall be immiscible in water and have a specific gravity of less than one.

2. Groundwater monitoring shall not be used for release detection after free product or a sheen is discovered in a monitoring well, unless:

a. A Site Rehabilitation Completion Order has been issued by the Department following the remediation of the free product or sheen, and there is no longer any free product in the monitoring well; or

b. Free product or sheen is not present and has not been observed in the well within the previous thirty (30) months, as demonstrated by records of at least six (6) monthly ground water monitoring sampling events, and within the previous two years, the system has been tested tight with tank and line piping tests or another internal method of release detection performed in accordance with subsection 62-761.640(3), F.A.C.

3. Another method of release detection specified in Rule 62-761.610, F.A.C., other than groundwater monitoring, shall be used when:

a. There is less than one foot of groundwater present in the well; or

b. The groundwater level is above the slotted portion of the well.

4. Records. The following information shall be maintained in accordance with the recordkeeping requirements of this chapter:

a. Date of sampling;

b. Depth of well;

c. Depth to groundwater;

d. Any presence of odor of stored regulated substances; and

e. Any sheen or free product found.

(d) Vapor monitoring.

1. Vapor monitoring can only be used to monitor regulated substances that are sufficiently volatile to be detected in soils or groundwater by vapor monitoring equipment.

2. The measurement of vapors in a vapor monitoring well shall not be rendered inoperative by groundwater, rainfall, soil moisture or other known interferences so that a discharge could go undetected for more than 30 days.

3. Sampling equipment shall be capable of detecting:

a. A vapor concentration of 500 parts per million total petroleum hydrocarbons, as measured by a flame ionization detector, for storage tank systems containing gasoline or equivalent petroleum substances;

b. A vapor concentration of 50 parts per million total petroleum hydrocarbons, as measured by a flame ionization detector, for storage tank systems containing kerosene, diesel or equivalent petroleum substances;

c. Vapor concentrations of hazardous substances or their constituents that would indicate a release; or

d. Vapor concentrations of tracer compounds used for release detection.

4. Vapor monitoring shall not be used for release detection if existing contamination interferes with the ability to detect a new release.

5. The vapor monitoring plan shall be developed and performed in accordance with DEP's "Guidelines for Vapor Monitoring." The plan shall include a description of monitoring wells or probes, the method of sampling, the establishment of a release detection response level and the data management procedures. Facilities with monitoring wells located in the tank excavation do not have to meet the requirements for DEP's "Guidelines for Site-Suitability Determinations for External Monitoring," provided that a demonstration can be made that the excavation contains sand or gravel backfill, and the wells were properly constructed and installed within the backfill.

(e) Visual inspections. Any visual inspection of the storage tank system or its secondary containment that reveals signs of corrosion, cracks, structural damage, leakage, or other similar problems shall be noted. Repairs shall be made in accordance with the requirements of Rule 62-761.700, F.A.C.

(3) Internal release detection methods.

(a) Interstitial monitoring for UST systems.

1. Interstitial monitoring for double-walled tanks, double-walled integral piping, dispenser liners, piping sumps, and other secondary containment systems, shall be designed and constructed to allow monitoring of the space between the primary and secondary containment. One or more of the following methods of interstitial monitoring shall be used:

a. Manual sampling of, or visual monitoring for, liquids;

b. Continuous electronic sensing equipment;

- c. Hydrostatic monitoring systems; or
- d. Vacuum monitoring.

2. Breach of integrity tests for Category-C systems. A test shall be performed for a breach of integrity of the interstice for double-walled USTs and for double-walled integral piping that is in contact with the soil and that is connected to USTs. Piping sumps and dispenser liners are not required to perform a breach of integrity test. The test shall be performed to determine the integrity of the inner and outer wall, is required only for tanks and integral piping with closed interstices, and does not apply to open-interstice systems with liners. The test shall be performed at the time of installation, and every five years from the date of installation, unless the test is a continuous test. If a UST is totally submerged in groundwater, monthly monitoring of the interstice for the presence of water shall be conducted. The breach of integrity test may be performed by using at least one of the following methods:

- a. A continuous hydrostatic system approved by the Department in accordance with subsection 62-761.850(2), F.A.C.;
- b. A continuous vacuum system, pursuant to paragraph 62-761.640(3)(a), F.A.C., that is approved by the Department in accordance with subsection 62-761.850(2), F.A.C.;
- c. Testing of the interstice for liquid tightness in accordance with manufacturer's installation instructions; or
- d. Another method in accordance with subsection 62-761.850(2), F.A.C.

3. Vacuum monitoring of the interstice shall meet the following requirements:

a. Liquid-filled gauges and air-filled gauges shall be calibrated in accordance with the National Institute of Standards and Technology. The gauges shall be operational at all times.

b. Vacuum monitoring may be used as a continuous method of release detection provided that the vacuum system is equipped with an audible or visual alarm. The alarm shall indicate when the minimum vacuum level allowed is reached as provided in the equipment approval granted in accordance subsection 62-761.850(2), F.A.C.

c. Vacuum readings shall be recorded monthly. Upon discovery of any significant vacuum level decrease, or any loss of vacuum exceeding 20% of the initial level, or any loss in excess of the levels established in the test protocols provided in the third party certification for the test method, the tank manufacturer shall be contacted and the vacuum refreshed in accordance with the storage tank system's equipment approval in subsection 62-761.850(2), F.A.C. If the loss of vacuum persists, an investigation shall be initiated and an incident reported in accordance with subsection 62-761.450(2), F.A.C. The source of the loss shall be repaired in accordance with Rule 62-761.700, F.A.C.

4. Interstitial monitoring for storage tanks and integral piping equipped with liners shall be designed and constructed to allow monitoring of the space between the primary and secondary containment and shall:

- a. Be capable of detecting a release through the inner wall into the interstice;
- b. Be constructed and installed so that groundwater, rainfall, or soil moisture will not render the testing or sampling method used inoperative; and
- c. Be equipped with an external release detection method meeting the standards of paragraphs 62-761.640(2)(a)-(d), F.A.C., except for the groundwater level and excavation zone assessment requirements; or
- d. Be visually inspected in accordance with paragraph 62-761.640(2)(e), F.A.C.; or
- e. Be equipped with a monitoring device approved in accordance with subsection 62-761.850(2), F.A.C., installed at the monitoring point within the liner.

(b) Inventory control.

1. General.

a. Inventory control shall be maintained for each single-walled tank that contains vehicular fuel.

b. Storage tank systems that have secondary containment are exempt from inventory control requirements.

2. Inventory control for USTs shall be performed and recorded in accordance with API RP 1621, as applicable. Manifolder tanks may be treated as a single tank for the purposes of inventory control. Inventory control shall be performed in the following manner:

a. Volume measurements for product inputs, withdrawals, and the amount remaining in each tank shall be recorded each operating day;

b. Measurements of product levels shall be recorded to the nearest one-eighth of an inch;

c. Product inputs shall be reconciled with delivery receipts by measurement of the tank product volume before and after delivery;

d. Product dispensed shall be metered as required by Chapters 525 and 531, F.S., and in accordance with the standards

established by the Florida Department of Agriculture and Consumer Services in Chapter 5F-2, F.A.C.;

e. The measurement of water level in the bottom of the tank shall be made at least once a week to the nearest one-eighth of an inch; and

f. The significant loss or gain of product shall be calculated for each month.

3. Inventory control requirements for USTs. Water fluctuations exceeding one inch not attributed to deliveries shall be investigated in the following manner:

a. The accessible parts of the storage system shall be inspected for damage or openings;

b. Release detection systems shall be checked for signs of a discharge; and

c. If, within a week, the investigation does not reveal the source of the water fluctuation, the entire storage tank system shall be tested in accordance with subsection 62-761.640(3), F.A.C.

4. Investigation procedures for significant loss or gain. An investigation shall be initiated immediately to determine the source of a significant loss or gain. The entire storage tank system, excluding the vent, but including piping connections and remote fill lines, shall be tested or inspected to determine if the system is product tight. The investigation shall continue until the source has been found, using the following investigative procedure:

a. Inventory records shall be checked for errors in arithmetic, data recording, and measurement;

b. If the significant loss or gain is not reconcilable or cannot be affirmatively demonstrated to be the result of theft, the accessible parts of the storage system shall be checked for damage or leaks;

c. Release detection systems shall be checked for signs of a discharge;

d. Calibration of the inventory measuring system and dispensing system shall be verified;

e. If the investigation does not reveal the source of the significant loss or gain within one week for USTs, or if the Department or County determines that it is necessary to investigate based on evidence that the significant loss or gain could result in potential harm to the environment, the storage tank system shall be tested in accordance with the manufacturer's guidelines, if applicable, and subsections 62-761.640(3) and (4), F.A.C.; and

f. If a discharge is discovered, the leaking or defective component of the storage tank system shall be repaired in accordance with Rule 62-761.700, F.A.C. If the storage tank system cannot be repaired, it shall be closed in accordance with subsection 62-761.800(2), F.A.C.

(c) Manual tank gauging. Manual tank gauging for tanks of 2000 gallons or less containing regulated substances shall meet the following requirements:

1. Tank liquid level measurements shall be taken weekly at the beginning and ending of a period between 36 hours and 58 hours in accordance with Table MTG, during which no liquid is added to or removed from the tank;

2. Level measurements shall be based on an average of two consecutive stick readings taken at both the beginning and ending of the period; and

3. The equipment used shall be capable of measuring the level of product over the full range of the tank's height to the nearest one-eighth of an inch.

4. Readings exceeding the standards described in Table MTG shall be investigated in accordance with Rule 62-761.820, F.A.C.

**TABLE MTG**

<b>Nominal tank capacity</b>	<b>Minimum duration of test</b>	<b>Weekly standard (one test)</b>	<b>Monthly standard (average of four tests)</b>
<b>550 gallons or less</b>	<b>36 hours</b>	<b>10 gallons</b>	<b>5 gallons</b>
<b>551-1,000 gallons (Tank diameter is less than or equal to 64")</b>	<b>44 hours</b>	<b>9 gallons</b>	<b>4 gallons</b>
<b>551-1,000 gallons (Tank diameter is less than or equal to 48")</b>	<b>58 hours</b>	<b>12 gallons</b>	<b>6 gallons</b>
<b>551-1,000 gallons (Tank diameter unknown)</b>	<b>36 hours</b>	<b>13 gallons</b>	<b>7 gallons</b>
<b>1,001-2,000 gallons</b>	<b>36 hours</b>	<b>26 gallons</b>	<b>13 gallons</b>

(d) Automatic tank gauge systems.

1. Automatic tank gauge systems that do not analyze data in a continuous manner shall be placed in a test mode at least once every 30 days.

2. Automatic tank gauge systems that continuously analyze the data collected by the system shall be operated in continuous test mode at all times and shall provide test results daily.

(e) Statistical Inventory Reconciliation (SIR). SIR shall be conducted according to the following requirements:

1. Data submitted for SIR analysis must be gathered in accordance with the requirements of subparagraphs 62-761.640(3)(e)1.-5., F.A.C.;

2. Results of each monthly analyses must include the calculated results from the data set for leak threshold, the minimum detectable leak rate, the calculated leak rate, and a determination of whether the result of the test was “Pass,” “Fail,” or “Inconclusive.” For the purposes of this section, the “leak threshold” is defined as the specific leak threshold of the SIR method approved in accordance with subsection 62-761.850(2), F.A.C., to meet the release detection level specified in paragraph 62-761.640(1)(a), F.A.C.;

3. “Pass” means that the calculated leak rate for the data set is less than the leak threshold and the minimum detectable leak rate is less than or equal to the certified performance standard (0.2 gph);

4. “Fail” means that the calculated leak rate for the data set is equal to or greater than the leak threshold;

5. “Inconclusive” means that the minimum detectable leak rate exceeds the certified performance standard (0.2 gph) and the calculated leak rate is less than the leak threshold. If for any other reason the test result is not a “pass” or “fail,” the result is “inconclusive”;

6. An Incident Notification Form shall be submitted to the County when a monthly SIR report of “Fail” is received;

7. An Incident Notification Form shall be submitted to the County after the receipt of two consecutive monthly SIR reports of “Inconclusive.” An investigation shall be performed in accordance with the Incident Response requirements specified in Rule 62-761.820, F.A.C. However, if at the end of the fourteen day investigation period provided in subsection 62-761.820(1), F.A.C., the SIR

data from the previous month is still inconclusive, a tightness test of the system shall be performed;

8. A data set shall consist of at least one month of valid data gathered over a time period not exceeding 35 days. A minimum of 20 data points over this 35 day period shall be used to calculate the leak rate unless the vendor of the SIR system approved under subsection 62-761.850(2), F.A.C., has provided a third party determination that a lesser number of data points is capable of detecting a release of 0.2 gph or 150 gallons within 30 days with a probability of detection of 0.95 and a probability of false alarm of 0.05; and

9. Results of monthly evaluations shall be recorded on Form 62-761.900(7), or on another similar form that provides the same information. These forms shall be kept as records in accordance with Rule 62-761.710, F.A.C.

(f) Tightness testing.

1. Tightness testing for all tanks shall be capable of detecting a 0.1 gph leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05 from any portion of the tank. Tightness testing shall account for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

2. If any volumetric tank tightness test is conducted at a level lower than the overfill protection device set point, a non-volumetric test shall also be used to test the ullage portion of the tank. When volumetric tests are conducted, there must be a minimum pressure differential of plus or minus one psig (pounds per square inch gauge), measured at the bottom of the tank, between the product hydrostatic pressure inside the tank and the hydrostatic pressure due to the external water table. When using this method, positive field verification of the depth of the water table must be performed, and the minimum liquid level of product in the tank shall be at least 30% of tank capacity, provided that the third party evaluation for the test method verifies detection capability at this level. If the water table depth cannot be verified, the minimum liquid level for volumetric tank testing shall be 65% of tank capacity.

3. Tank and line tightness testing shall be performed in accordance with Chapter 4 of NFPA 329.

4. Overfill protection and spill containment devices shall be inspected before a tightness test is performed to ensure that these devices do not interfere with the test, and after the test to ensure that the devices are operating properly.

(4) Small diameter integral piping in contact with the soil.

(a) Line leak detectors for USTs. Line leak detectors shall:

1. Be capable of detecting a discharge of 3.0 gph with a probability of detection of 0.95 and a probability of false alarm of 0.05 at a line pressure of 10 psi within one hour;

2. Have an annual test of the operation of the leak detector conducted in accordance with the manufacturer's requirements by an individual certified or trained by the manufacturer to determine whether the device is functioning as designed. Remote testing of the leak detector can be performed by the manufacturer if the remote test is approved under subsection 62-761.850(2), F.A.C.;

3. Restrict flow within one hour if designed with mechanical flow restriction;

4. When a discharge of 3.0 gph is detected, shut off power to the pump if designed with automatic electronic shutoff. When in test mode, line leak detectors with automatic electronic shutoff shall also be able to detect a discharge of 0.2 gph at a line pressure of 150% of operating pressure, or an equivalent leak rate, with a probability of detection within a one month period of at least 0.95 and a probability of false alarm of no more than 0.05. When a discharge of 0.2 gph is detected, the leak detector shall provide audible or visual alarms that can be clearly heard or seen by the operator of the facility, or if monitored remotely on a real time basis, the alarm condition must be immediately transmitted from the remote location to the facility operator; and

5. Instead of using a line leak detector as a method of release detection for pressurized small diameter piping associated with double-walled integral piping, a continuously operating interstitial monitoring device can be used. Continuously operating interstitial monitoring devices shall be capable of detecting a release of 10 gallons within one hour and shutting off the pump.

(b) Tightness testing. Tightness testing for pressurized piping in contact with the soil shall be capable of detecting a 0.1 gallon per hour leak rate at one and one-half times the operating pressure with a probability of detection of 0.95 and a probability of false alarm of 0.05.

(5) Bulk product piping.

(a) An annual test shall be performed of single-walled bulk product piping in contact with the soil. Prior to testing the piping system, a leak tightness evaluation of all exposed components shall be performed through visual inspection, or by another method approved by the Department in accordance with Rule 62-761.850, F.A.C. The evaluation shall be verified and recorded. One of the following methods shall be used for the annual test:

1. A bulk product piping test method approved in accordance with subsection 62-761.850(2), F.A.C.;

2. An API RP 1110 hydrostatic test; or
3. An ASME B31.4 hydrostatic test.

(b) Double-walled bulk product and hydrant piping, and other bulk piping equipped with secondary containment shall have methods of release detection and testing for a breach of integrity that meet the requirements of subparagraph 62-761.640(3)(a)2. or 4., F.A.C., as applicable.

(c) Records of all test results shall be maintained in accordance with the Appendix-Test Records of API RP 1110, or Chapter VI of ASME B31.4, as applicable, pursuant to subsection 62-761.710(1), F.A.C.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Formerly 17-761.640, Amended 9-30-96, 7-13-98, 6-21-04.*

### **62-761.700 Repairs, Operation and Maintenance of Storage Tank Systems.**

(1) General.

(a) Repairs.

1. Repairs shall be performed if any component of a storage tank system is discovered to have:

- a. Discharged or contributed to the discharge of a regulated substance;
- b. A release of regulated substances into secondary containment;
- c. The presence of groundwater in the interstice of a double-walled UST or pipe; or
- d. An operational or structural problem that could potentially result in a discharge or release.

2. If repairs are required for any component or part of a storage tank system, and the nature of the repair activities or the condition of the component or part of the system requiring a repair may result in a release, and the component or part cannot be otherwise isolated from the system, the storage tank system shall be taken out of operation until the tank has been repaired or replaced. The restrictions against storage tank system operation shall not apply if the system contains heating oil or other fuels used solely for the generation of electricity where the removal of the storage system from service would result in the shut down of electrical generating units serviced by the system.

3. Repairs shall be made:

a. In a manner that will prevent discharges from structural failure or corrosion for the remaining operational life of the storage tank system;

b. In accordance with manufacturer's specifications, NFPA Standard 30 or other applicable reference standards; and

c. To restore the structural integrity of the storage tank system.

4. Repaired components shall be tightness tested, pressure tested, or tested for a breach of integrity, as applicable, before being placed back into service.

5. Repairs to fiberglass reinforced plastic tanks and steel tanks coated with a fiberglass reinforced plastic composite shall be made by an authorized representative of the tank manufacturer or its successor, or in accordance with subsection 62-761.500(3), F.A.C.

6. Piping that is damaged or that has caused a discharge of a regulated substance shall be replaced or repaired. Pipe sections and fittings may be repaired in accordance with applicable standards in subsection 62-761.500(8), F.A.C. Replacement of additional lengths of piping in contact with the soil are exempt from the requirements for secondary containment, provided that:

a. The piping system does not have, or will not have to install, secondary containment until the deadlines established in Rule 62-761.510, F.A.C.; and

b. The length of replacement or additional piping is less than 25% of the total length of the existing integral piping for the individual tank, or 100 feet, whichever is less.

(b) Cathodic protection.

1. Cathodic protection systems shall be installed, operated and maintained to provide continuous corrosion protection to the metal components of those portions of the tank and integral piping in contact with the soil.

2. Inspection and testing requirements.

a. General. Storage tank systems equipped with any type of cathodic protection must be inspected and tested by a Corrosion Professional or a Cathodic Protection Tester within six months of installation or repair and at least every year thereafter in accordance with the criteria contained in NACE International RP-0169-96 and RP-0285-95, as applicable. Factory-installed (galvanic) cathodic protection systems may be tested every three years.

b. Impressed current systems. Storage tank systems with impressed current systems shall be inspected at intervals not exceeding two months. All sources of impressed current shall be inspected. Evidence of proper functioning shall be current output,

normal power consumption, a signal indicating normal operation, or satisfactory electrical state of the protected structure. Impressed current systems that are inoperative for a cumulative period exceeding 1440 hours shall be assessed by a Corrosion Professional to ensure that the storage tank system is structurally sound, free of corrosion holes, and operating in accordance with the design criteria.

c. Sacrificial anode systems. Storage tank systems with sacrificial anodes shall either have permanent test stations for soil-to-structure potential measurements or use temporary field test stations for annual testing in accordance with sub-subparagraph 62-761.700(1)(b)2.a., F.A.C.

3. Storage tank systems with cathodic protection systems that cannot achieve or maintain protection levels in accordance with the design criteria shall:

a. Be repaired in accordance with sub-subparagraph 62-761.700(1)(b)2.a., F.A.C., or

b. Be placed out-of-service in accordance with subsection 62-761.800(1), F.A.C.

4. Records of the continuous operation of impressed current systems and all cathodic protection inspection and testing activities shall be maintained in accordance with paragraph 62-761.700(1)(b), F.A.C.

(c) Operation and maintenance.

1. Spill containment devices, dispenser liners, and piping sumps shall be maintained to provide access for monthly examination and water removal as necessary. Water collected in spill containment devices, or in piping sumps and dispenser liners that is above the opening of the integral piping connection, or any regulated substances collected in these storage tank system components shall be removed and be either reused or properly disposed of.

2. Owners or operators shall ensure that the volume available in the tank is greater than the volume of regulated substances to be transferred to the tank before the transfer is made and shall ensure that any transfer is repeatedly monitored to prevent overfilling and spilling.

3. All release detection devices shall be tested annually to ensure proper operation. The test shall be conducted according to manufacturer's specifications, and shall include, at a minimum, a determination of whether the device operates as designed.

4. Petroleum contact water from storage tank systems shall be managed in accordance with Chapter 62-740, F.A.C.

5. Regardless of the method of release detection used, inventory control shall be performed for USTs containing vehicular fuel that do not have secondary containment. One of the following methods of inventory control shall be used:

a. Inventory control in accordance with paragraph 62-761.640(3)(b), F.A.C.;

b. Statistical inventory reconciliation in accordance with paragraph 62-761.640(3)(e), F.A.C.;

c. Automatic tank gauging in accordance with paragraph 62-761.640(3)(d), F.A.C.; or

d. Manual tank gauging in accordance with paragraph 62-761.640(3)(c), F.A.C.

(2) Single-walled storage tank systems that have been upgraded with cathodic protection or internally lined before June 30, 1992, may be repaired in accordance with this section until the storage tank system is upgraded with secondary containment in accordance with Rule 62-761.510, F.A.C. Storage tank systems with secondary containment may be repaired in accordance with this section at any time during the operational life of the storage tank system.

(3) Tanks shall be tightness tested before being placed back in service, unless another testing method has been approved in accordance with subsection 62-761.850(2), F.A.C. Small diameter piping shall be tightness tested before being placed back into service whenever dispensers connected to that piping are replaced or whenever the piping has been disconnected and then reconnected.

(4) Tanks may be repaired with internal lining if:

(a) The internal lining is installed in accordance with API RP 1631, and documentation is available from the installer that demonstrates these requirements have been met; and

(b) Within 10 years after the installation of internal lining, and every five years thereafter, the internally lined tank is:

1. Inspected internally in accordance with NLP 631, Chapter B, and found to be structurally sound with the internal lining still performing in accordance with original design specifications, or repaired to original design specifications in accordance with API RP 1631. If the tank fails to meet these criteria, the owner or operator shall close the storage tank system in accordance with subsection 62-761.800(2), F.A.C.; or

2. Evaluated in accordance with ASTM Designation ES40-94, and determined by a Corrosion Professional to be suitable for the installation of cathodic protection. If a determination is made that the system is suitable, cathodic protection shall be designed by a Corrosion Professional, installed by a Certified Contractor, and operated in accordance with Rule 62-761.500, F.A.C. If the system is determined to be unsuitable, it shall be closed in accordance with subsection 62-761.800(2), F.A.C.; and

3. Tightness tested in accordance with subsection 62-761.640(3), F.A.C., before the tank is placed back into service and every five years after installation of the internal lining.

(5) Tanks may be repaired with internal lining and cathodic protection if:

(a) The internal lining is installed in accordance with API RP 1631;

(b) The cathodic protection system meets the requirements of sub-paragraphs 62-761.500(1)(a)2.b-d., F.A.C.; and

(c) A tightness test that meets the requirements of subsection 62-761.640(3), F.A.C., is performed before the tank is placed back into service and every five years after installation of the internal lining.

(6) UST Category-A tanks that were upgraded with internal lining or cathodic protection, or both, shall be internally inspected or tightness tested, as applicable, in accordance with subparagraph 62-761.700(2)(c)2., F.A.C.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 3-12-91, Formerly 17-761.700, Amended 9-30-96, 7-13-98, 6-21-04.*

#### **62-761.710 Recordkeeping.**

(1) All records shall be dated, maintained in permanent form, and available for inspection by the Department or County. If records are not kept at the facility, they shall be made available at the facility or another agreed upon location upon five working days notice. Site access to the facility shall be provided for compliance inspections conducted at reasonable times.

(2) Records of the following are required to be kept for two years:

(a) Measurements and reconciliations of inventory, as applicable;

(b) Repair, operation, and maintenance records;

(c) Release detection results, including electronic test results, regardless of the frequency, and monthly visual inspections performed in accordance with paragraph 62-761.640(2)(e), F.A.C. The presence of a regulated substance's odor, sheen, or free product shall be recorded for each sampling event;

(d) Release detection response level descriptions;

(e) A copy of all test data and results gathered during tightness tests, pressure tests, and breach of integrity tests, and the name and type of the test approved under Rule 62-761.850, F.A.C.;

(f) Certification of Financial Responsibility on Form 62-761.900(3);

(g) Records of types of fuels stored per tank; and

(h) The repair or replacement of gaskets, valve packings, valves, flanges, and connection/disconnection fittings for bulk product piping if the repair or replacement is performed in response to a discharge or loss of regulated substances.

(3) Records of the following, generated after July 13, 1998, shall be maintained for the life of the storage tank system:

(a) Results of internal inspections and non-destructive testing;

(b) Any performance claims for release detection equipment described in writing by the equipment manufacturer or installer;

(c) Records of storage tank system installations, replacements, and upgrades;

(d) Records of installation, maintenance, inspections, and testing of cathodic protection systems in accordance with NACE standards;

(e) Site suitability determinations in accordance with subsection 62-761.640(2), F.A.C.;

(f) Vapor monitoring plans and all records kept pursuant to the plan;

(g) Closure assessment reports if the location continues as a facility; and

(h) Verification from a Certified Contractor of the existence of a single check valve beneath the suction pump for suction piping systems.

*Specific Authority 376.303, 376.322(3) FS. Law Implemented 376.303, 376.322 FS. History—New 12-10-90, Formerly 17-761.710, Amended 9-30-96, 7-13-98, Repromulgated 6-21-04.*

#### **62-761.800 Out-of-Service and Closure Requirements.**

(1) Out-of-service storage tank systems.

(a) General.

1. Storage tank systems that are taken out-of-service, as defined in subsection 62-761.200(40), F.A.C., shall:

a. Continue to operate and maintain corrosion protection in accordance with paragraph 62-761.700(1)(b), F.A.C.;

b. Perform external release detection for sites without contamination, as applicable, every six months in accordance with provisions of subsection 62-761.640(2), F.A.C.;

c. Leave vent lines open and functioning;

- d. Empty the system and cap or secure all lines, pumps, manways, and ancillary equipment, as applicable; and
- e. Secure or close off the system to outside access.

2. If the storage tank system is required to be upgraded during the time that it is out-of-service, it shall be upgraded or replaced in accordance with this chapter before it is returned to service.

3. Systems with secondary containment installed and operated in accordance with this Chapter may remain in a continuous out-of-service status for ten years. After this period, the system shall be returned to service or closed in accordance with subsection 62-761.800(2), F.A.C.

4. Tightness, pressure, or other tests shall be performed in accordance with subsection 62-761.640(2), F.A.C., as applicable, on any systems being returned to service.

(b) Before being returned to service, the following tests shall be performed in accordance with subsection 62-761.640(3), F.A.C., for systems that are taken out-of-service for more than 180 days:

- 1. A tightness test for single-walled systems; or
- 2. A breach of integrity test for double-walled Category-C systems.

(c) Single-walled systems that are taken out-of-service shall not be kept out-of-service longer than two years for corrosion-protected systems or one year for unprotected bare steel systems. After the end of these time periods, the systems shall either be upgraded or permanently closed.

(2) Closure of storage tank systems.

(a) General.

1. Closure of storage tank systems shall be performed by:

- a. Removing all liquids and accumulated sludges;
- b. Disconnecting and capping, or removing, all integral piping. Manways shall be secured to prevent access;
- c. Closing the storage tank system in accordance with paragraphs 62-761.800(2)(b), F.A.C., as applicable; and
- d. Conducting a closure assessment in accordance with subsection 62-761.800(3), F.A.C.

2. After closure, storage tank systems may be used to store materials or substances other than regulated substances in accordance with all applicable Department reference standards, (for example, API 1604). Owners and operators are advised that other federal, state, or local requirements may apply to these activities.

3. Monitoring wells associated with closed systems that are not being used for release detection or site assessment purposes shall be closed in accordance with paragraph 62-761.600(1)(k), F.A.C.

(b) Unmaintained systems shall be permanently closed within 90 days of discovery.

(c) System removal, closure in-place, and disposal shall be performed:

1. In accordance with API RP 1604 and NFPA 30; and

2. By a Certified Contractor if the system is removed from the ground, unless it is closed in place by filling it with a solid inert material of sufficient density to prevent a structural collapse of the closed system.

(3) Closure assessment of storage tank systems.

(a) At time of closure, replacement, installation of secondary containment, or change in service from a regulated substance to a non-regulated substance, an assessment shall be performed to determine if a discharge from the system or system components has occurred.

1. If a Site Rehabilitation Completion Order (SRCO) or a Monitoring Only Plan (MOP) Approval Order has been issued by the Department for a contaminated area of a site, a closure assessment shall be performed for any subsequent storage tank system removal, replacement, or installation of secondary containment.

2. Tanks, pipes, or other system components in contact with soil at any site are subject to closure assessment requirements.

(b) A closure assessment is not required for:

1. Sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C., including those that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Nevertheless, documentation of procedures followed and results obtained during closure shall be reported in a Limited Closure Summary Report, Form 62-761.900(8), and in accordance with Section A of DEP's "Storage Tank System Closure Assessment Requirements";

2. Systems initially installed with secondary containment, provided that no unexplained positive response of an interstitial release detection device or method occurred during the operational life of the system, or the secondary containment passed a breach of integrity test prior to closure; and

3. Systems upgraded with secondary containment that have closed interstitial spaces, where a closure assessment was performed prior to installation of secondary containment, provided that the secondary containment passed a breach of integrity test in accordance with paragraph 62-761.640(3)(a), F.A.C.;

(c) Closure assessment sampling and analysis shall be conducted according to DEP's "Storage Tank System Closure Assessment Requirements."

(d) A closure assessment report shall be submitted to the County within 60 days of completion of any of the activities listed in paragraph 62-761.800(3)(a), F.A.C. The report shall include sample types, sample locations and measurement methods, a site map, methods of maintaining quality assurance and quality control, and any analytical results obtained during the assessment in accordance with DEP's "Storage Tank System Closure Assessment Requirements."

(e) Persons are advised that contaminated soil excavated, disposed of, or stockpiled on site during the closure of a storage tank system is regulated by Chapter 62-770, F.A.C.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Formerly 17-761.800, Amended 9-30-96, 7-13-98, 6-21-04.*

### **62-761.820 Incident and Discharge Response.**

(1) Incident response.

(a) If an incident occurs at a facility, actions shall be taken promptly to investigate the incident to determine if a discharge has occurred. Notification of the incident shall be sent to the County on Form 62-761.900(6). A discharge shall be reported in accordance with subsection 62-761.450(3), F.A.C., if one is discovered during the incident investigation.

(b) If the investigation indicates that the incident was not a discharge, a written confirmation and explanation shall be submitted to the County. Test results or reports, which support the findings, shall be maintained on site as records.

(c) The investigation shall be completed within two weeks of the date of discovery of the incident. At the end of this time period, either a discharge report form or a written confirmation and explanation that the release was not a discharge shall be submitted to the County.

(d) Any spill or loss of regulated substance into secondary containment shall be removed within three days of discovery.

(2) Discharge response.

(a) If a discharge of a regulated substance occurs at a facility, actions shall be taken immediately to contain, remove, and abate the discharge under all applicable Department rules (for example, Chapter 62-770, F.A.C., Petroleum Contamination Site Cleanup Criteria). Owners and operators are advised that other federal, state, or local requirements may apply to these activities. If the contamination present is subject to the provisions of Chapter 62-770, F.A.C., corrective action, including free product recovery, shall be performed in accordance with that Chapter.

(b) When evidence of a discharge from a storage tank system is discovered and reported in accordance with subsection 62-761.450(3), F.A.C., the following actions shall be taken:

1. If the source or cause of the discharge is unknown, the discharge shall be investigated in accordance with NFPA 329, Chapters 3 and 5;

2. The regulated substance shall be removed from the system as necessary to prevent further discharge to the environment. Notice of the need to take the system out-of-service on an emergency basis shall be made to the County in accordance with subsection 62-761.450(1), F.A.C.;

3. Fire, explosion, and vapor hazards shall be identified and mitigated; and

4. The system shall be repaired in accordance with Rule 62-761.700, F.A.C. If the system cannot be repaired, it shall be closed in accordance with subsection 62-761.800(2), F.A.C.

(c) The system shall be tested if the Department or County determines that:

1. There has been a failure to comply with the release detection requirements of Rules 62-761.600-.640, F.A.C.;

2. A release detection device, well, or method indicates that a discharge of a regulated substance has occurred, and the discharge was not previously reported; or

3. Groundwater contamination that is not associated with previously known contamination is present in the vicinity of the system and the system is likely to be a source of the contamination.

(d) Within three days of the discovery of a discharge, the following steps shall be initiated:

1. A test on the system in accordance with subsection 62-761.640(3), F.A.C., if the test is necessary to confirm a discharge; and

2. If found to be leaking, placement of the system out-of-service in accordance with subsection 62-761.800(1), F.A.C., until repaired, replaced or closed.

(e) Contaminated soil excavated, disposed of, or stockpiled on site during the closure of a storage tank system shall be managed in accordance with Chapter 62-770, F.A.C.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History—New 12-10-90, Formerly 17-761.820, Amended 9-30-96, 7-13-98, 6-21-04.*

**62-761.850 Alternative Requirements and Equipment Approvals.**

(1) Alternative requirements.

(a) Any person subject to the provisions of this chapter may request in writing a determination by the Secretary or the Secretary's designee that any requirement of this Chapter shall not apply to a regulated storage tank system at a facility, and shall request approval of alternate procedures or requirements.

(b) The request shall set forth at a minimum the following information:

1. The specific storage tank system or facility for which an exception is sought;
2. The specific provisions of Chapter 62-761, F.A.C., from which an exception is sought;
3. The basis for the exception;

4. The alternative procedure or requirement for which approval is sought;

5. Documentation that demonstrates that the alternative procedure or requirement provides an equivalent or greater degree of protection for the lands, surface waters or groundwaters of the State as the established requirement; and

6. Documentation that demonstrates that the alternative procedure or requirement is at least as effective as the established procedure or requirement.

7. If an alternate procedure or requirement is not able to be sought under subparagraph 5. or 6., then documentation that demonstrates that the specific provisions of this Chapter from which the exception is sought imposes regulatory costs on the regulated entity that could be reduced through approval of a less costly regulatory alternative or requirement that provides a substantially equivalent degree of protection for the lands, surface waters, or groundwaters of the State as the established requirement.

(c) Within 60 days of the receipt of a request for approval of an alternative procedure or requirement, the Department shall approve the request or notify the responsible party in writing that the request does not demonstrate that the requirements of subsection 62-761.850(1), F.A.C., are met.

(d) The Secretary or the Secretary's designee shall specify by order each alternative procedure or requirement approved for an individual storage tank system or facility in accordance with this rule or shall issue an order denying the request for such approval. The Department's order shall be agency action, reviewable in accordance with Sections 120.569 and 120.57, F.S.

(e) The provisions of this rule do not preclude the use of any other applicable relief provisions.

(2) Equipment approvals.

(a) Storage tank system equipment used in the State of Florida must have the approval of the Department before installation or use, with the exception of:

1. Dispensers, dispenser islands, nozzles, and hoses;
2. Monitoring well bailers;
3. Manhole and fillbox covers;
4. Valves;
5. Cathodic protection test stations;
6. Metallic bulk product piping;
7. Small diameter piping not in contact with soil, unless the piping extends over or into surface waters; and
8. Vent lines.

(b) Equipment approval requests shall be submitted to the Department with a demonstration that the equipment will provide equivalent protection or meet the appropriate performance standards contained in this chapter. Any approvals or denials received from other states shall be included in the approval request to the Department.

(c) A third-party demonstration by a Nationally Recognized Laboratory shall be submitted to the Department with the application. The third-party demonstration shall provide:

1. A technical evaluation of the equipment;
2. Test results that verify that the equipment will function as designed; and
3. A professional certification that the equipment meets the performance standards contained in Rule 62-761.500, F.A.C.

(d) Within 60 days of the receipt of a request for an equipment approval, the Department shall approve the request or notify

the responsible party in writing that the request does not demonstrate that the requirements of subsection 62-761.850(2), F.A.C., are met.

(e) The Secretary or the Secretary's designee shall specify by order each equipment approval that is approved in accordance with this rule or shall issue an order denying the request for such approval. The Department's order shall be agency action, reviewable in accordance with Sections 120.569 and 120.57, F.S.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History--New 12-10-90, Formerly 17-761.850, Amended 9-30-96, 7-13-98, 6-21-04.*

#### **62-761.900 Storage Tank Forms.**

The forms used by the Department in the Storage Tank System Program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, and with the subject title and effective date. Copies of forms may be obtained by writing to the Administrator, Storage Tank Regulation Section, Division of Waste Management, Florida Department of Environmental Protection, 2600 Blair Stone Road, M.S. 4525, Tallahassee, Florida 32399-2400.

- (1) Discharge Report Form, July 13, 1998.
- (2) Storage Tank Facility Registration Form, July 13, 1998.
- (3) Certification of Financial Responsibility, July 13, 1998.
- (4) Alternative Requirement or Procedure Form, July 13, 1998.
- (5) Underground Storage Tank Installation and Removal Form for Certified Contractors, July 13, 1998.
- (6) Incident Notification Form, July 13, 1998.
- (7) Monthly Statistical Inventory Reconciliation (SIR) Report, July 13, 1998.
- (8) Limited Closure Summary Report Form, July 13, 1998.

*Specific Authority 376.303 FS. Law Implemented 376.303 FS. History--New 12-10-90, Formerly 17-761.900, Amended 9-30-98, 7-13-98, Repromulgated 6-21-04.*