CHAPTER 62-762 ABOVEGROUND STORAGE TANK SYSTEMS

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62-762.101 Intent.

- (1) The purpose of this chapter is to provide requirements for aboveground storage tank systems that store regulated substances in order to minimize the occurrence and environmental risks of releases and discharges. This chapter provides requirements for aboveground storage tank systems having individual storage tank capacities greater than 550 gallons.
- (2) For mineral acid storage tank systems, the purpose of this chapter is to minimize the occurrence and environmental risks of discharges from aboveground storage tanks having capacities greater than 110 gallons that contain hydrobromic, hydrochloric, hydrofluoric, phosphoric or sulfuric acid. Mineral acid storage tank systems are only subject to Rule 62-762.891, Florida Administrative Code (F.A.C.).
- (3) For compression vessels and aboveground hazardous substance storage tank systems with individual capacities greater than 110 gallons, the purpose of this chapter is to establish a registration program. These systems are only subject to Rule 62-762.401, F.A.C.
- (4) This chapter implements the requirements of Chapter 376, Florida Statutes (F.S.). Final agency action related to the functions that may be carried out by a locally administered governmental program (county) under contract with the Department pursuant to Section 376.3073, F.S., shall be taken by the Department.
- (5) Site access to the facility, subject to safety considerations, shall be provided for compliance inspections conducted at reasonable times and with notice by phone or email. The facility owner or operator shall provide an authorized facility representative to safely access storage tank system components for inspection purposes and demonstrate operational functionality of electronic equipment.

Rulemaking Authority 376.303, 376.322(3) FS. Law Implemented 376.303, 376.3073, 376.322(3), 403.091 FS. History-New 6-21-04, Amended 1-

62-762.201 Definitions.

All words and phrases defined in Sections 376.031 and 376.301, F.S., shall have the same meaning when used in this chapter unless specifically stated otherwise in this chapter. See Sections 376.031 and 376.301, F.S., for definitions of the following terms: "Bulk product facility," "Compression vessel," "Contaminant," "Contaminated site," "Department," "Discharge," "Facility," "Flow-through process tank," "Hazardous substances," "Operator," "Owner," "Petroleum products," "Pollutants," "Transfer," or "transferred," and "Vessel." The following words and phrases used in this chapter shall, unless the context indicates otherwise, 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 (NH_3), or ammonium ion (NH_4).
 - (2) "AST" means an aboveground storage tank.
- (3) "Biofuel" means fuel produced from renewable resources, especially, but not limited to, organic feedstocks such as plant biomass, vegetable oils, animal fats, and treated municipal and industrial wastes.
- (4) "Bulk product piping" means on-site integral piping with an internal diameter greater than three inches utilized for transporting regulated substances.
- (5) "Cathodic protection" means a method of preventing corrosion of a metal surface through the use of galvanic anodes or impressed current.
- (6) "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 and be certified as a NACE or STI cathodic protection tester.
- (7) "Chlorine" includes organic and inorganic compounds that are liquids at standard temperature and pressure that, when discharged, may release free chlorine (Cl₂) or chlorides (Cl⁻).
- (8) "Closure Integrity Evaluation for shop fabricated storage tank systems" is an assessment of shop fabricated storage tank system integrity for storage tanks, integral piping, piping sumps, dispenser sumps, and spill containment systems that are in contact with the soil, that is performed by a third-party inspection or testing entity at closure or replacement. The evaluation is a physical test of interstitial tightness or visual inspection of the interstice of a secondarily contained storage tank system, secondarily contained storage tank system component, or a containment integrity test of a single-walled piping sump, dispenser sump, or spill containment system.
- (9) "Closure Integrity Evaluation for field erected storage tank systems" is an assessment of field erected storage tank system integrity for storage tanks, integral piping, hydrant sumps, and containment systems that are in contact with the soil, that is performed by a third-party inspection or testing entity at closure or replacement. The evaluation is a physical test of interstitial tightness or visual inspection of the interstice of a secondarily contained storage tank system, secondarily contained storage tank system component, or a containment integrity test of a single-walled hydrant sump or containment system.
- (10) "Closure Integrity Report" means Closure Integrity Evaluation Report Form for ASTs 62-762.901(7), incorporated by reference in paragraph 62-762.411(2)(c), F.A.C.
- (11) "Closure Report" is a report prepared in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*.
- (12) "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.
- (13) "Containment" means a sufficiently impervious structure, release prevention barrier, or device designed to prevent the discharge of regulated substances in the event of a release.
- (14) "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 as either a Corrosion Specialist or a Cathodic Protection Specialist, or be a

professional engineer licensed in the State of Florida. Corrosion professionals using vapor corrosion inhibitor technologies for corrosion control must have experience with and knowledge of vapor corrosion inhibitors. Vapor corrosion inhibitors must be registered in accordance with subsection 62-762.851(2), F.A.C. Installers of vapor corrosion inhibitors must have certification from the VCI equipment registration holder.

- (15) "Corrosion Protection" means the minimization of corrosion by the use of cathodic protection or vapor corrosion inhibitors.
- (16) "County" means a locally administered governmental program under contract with the Department to perform compliance verification activities at facilities with storage tank systems within the boundaries stipulated in the applicable contract.
- (17) "Day tank" means a shop fabricated storage tank with a capacity of less than or equal to 550 gallons, connected to a regulated tank by way of integral piping, that contains the amount of fuel commonly used in a 24-hour period.
- (18) "Dike field area" means the area around the tank or tanks that extends from the circumference of the base of a storage tank to the top of the berm, dike, or retaining wall surrounding the tank.
- (19) "Discovery" means either actual knowledge or knowledge of facts that could reasonably lead to actual knowledge of the existence of a previously unreported incident, release, or discharge.
- (20) "Dispenser" means a dispensing system that is used to transfer regulated substances from a fixed point to a vehicle or portable container.
- (21) "Dispenser sump" means a storage tank system component installed as secondary containment beneath a dispenser to prevent discharges of regulated substances.
- (22) "Docklines" means piping originating at the first shore side valve after the marine transfer area, as determined by the U.S. Coast Guard Captain of the Port, and terminating at the:
 - (a) First valve inside the dike field area or other approved containment within a bulk product facility;
- (b) Valve or manifold nearest to the double-walled storage tank that the piping conveys regulated substance to at a bulk product facility, or
- (c) Valve or manifold nearest to the storage tank containing high viscosity product that piping conveys regulated substance to at a bulk product facility.
- (23) "Double-bottomed" means a storage tank that has secondary containment in the form of an outer tank bottom having an interstitial space between the primary tank bottom and the secondary outer tank bottom.
- (24) "Double-walled" means a storage tank system or system component that has an outer wall that provides secondary containment.
 - (25) "DRF" means Discharge Report Form 62-762.901(1).
- (26) "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.
 - (27) "Field-erected storage tank" means a storage tank that is constructed by assembling it on-site at the facility.
- (28) "Free product" means the presence of a regulated substance as a nonaqueous phase liquid in the environment in excess of 0.01 foot in thickness, measured at its thickest point.
- (29) "High viscosity product" means a regulated substance with a viscosity of 30 centistokes (cSt) and higher at 40 degrees Centigrade, such as American Society for Testing and Materials (ASTM) grades 5 and 6 residual oils, intermediate fuel oils, or Bunker C fuel.
- (30) "Hydrant piping" means a continuously pressurized integral bulk product piping system with hydrant pits used for distributing product.
- (31) "Hydrant Sumps" or "Hydrant Pits" means any secondary containment system associated with hydrant piping, including hydrant pits, isolation valve pits, valve access pits, and control pits but excludes double-walled piping.
- (32) "Hydrostatic test" means a containment integrity test for a storage tank system or storage tank system component that is performed in accordance with this chapter using equilibrium and the pressure of liquids.
 - (33) "Impervious" means:
- (a) A synthetic material or another material registered in accordance with subsection 62-762.851(2), F.A.C., that is compatible with the stored regulated substance, and has a permeability rate to the regulated substance stored of 1×10^{-7} cm/sec or less, or
 - (b) For concrete structures, a material that:
- 1. Meets the design and construction standards of *Design Considerations for Environmental Engineering Concrete Structures*, ACI 350.4R-04, 2004 Edition, and *Control of Cracking in Concrete Structures*, ACI 224R-01, (Reapproved 2008), hereby adopted

and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at ACI, 38800 Country Club Drive, Farmington Hills, Michigan 48331-3439, or at: http://www.concrete.org/, or

- 2. Is applied to the concrete in accordance with *Design, Installation, and Maintenance of Coating Systems for Concrete Used in Secondary Containment,* SSPC-TU 2/NACE 6G197, Publication No. 97-04/Item No. 24193, February 1997, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at SSPC: The Coatings Society, 40 24th Street, 6th Floor, Pittsburgh, Pennsylvania 15222-4643, (877)281-7772, or from the publisher's website at http://www.sspc.org/; or from the publisher at NACE International, 1440 South Creek Drive, Houston, Texas 77084-4906, or from the publisher's website at http://www.nace.org/.
- (34) "In contact with the soil" means any portion of a storage tank system, that physically touches the soil or if not in direct contact with the soil, is separated from the soil only by a casing, wrapping, or other material that is not impervious.
- (35) "Incident" is a condition or situation indicating that a release or discharge may have occurred from a storage tank system or system component.
- (36) "Industrial occupancy building" is an enclosed structure that contains a storage tank system that is used in association with an industrial or manufacturing process, or for electric power generating utilities, provided that the building was constructed and is used primarily for industrial, manufacturing, or electric power generating purposes, and not solely for the purpose of storing regulated substances. An industrial occupancy building is a structure that has an impervious floor (without valves, drains, or other openings) that prevents regulated substances from being discharged. Industrial occupancy buildings constructed between July 13, 1998, and January 11, 2017, must meet the applicable regulatory requirements in this chapter in effect at that time. Industrial occupancy buildings constructed after January 11, 2017, must:
- (a) Be constructed in accordance with *Flammable and Combustible Liquids Code, Storage Tank Buildings*, Chapter 24 of NFPA 30, 2015 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NFPA, 1 Batterymarch Park, Quincy, Massachusetts 02169, (617)770-3000, or at www.nfpa.org/;
- (b) Have at least Type II construction in accordance with *Standard on Types of Building Construction*, NFPA 220, 2015 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NFPA, 1 Batterymarch Park, Quincy, Massachusetts 02169, (617)770-3000, or at www.nfpa.org/;
- (c) Be ventilated in accordance with *Standard on Explosion Protection by Deflagration Venting*, NFPA 68, 2013 Edition; and *Standard on Explosion Prevention Systems*, NFPA 69, 2014 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NFPA, 1 Batterymarch Park, Quincy, Massachusetts 02169, (617)770-3000, or at www.nfpa.org/; and,
- (d) Be verified as meeting the above construction requirements by either a registered architect or a professional engineer licensed in the State of Florida.
 - (37) "INF" means Incident Notification Form 62-762.901(6), incorporated by reference in subsection 62-762.411(4), F.A.C.
- (38) "In-service" means a storage tank system where the owner or operator has not reported to the Department pursuant to subsection 62-762.401(2), F.A.C., that the tank is out-of-service pursuant to subsection 62-762.801(1) or 62-762.802(2), F.A.C., or temporary out-of-service pursuant to subsection 62-762.802(1), F.A.C.
- (39) "Integral piping" means on-site piping, originating or terminating at the regulated storage tank or tanks, that conveys regulated substances. Vapor, or other recovery lines, pipeline facilities, and vent lines, are not considered integral piping. Integral piping includes all valves, elbows, joints, flanges, pumps, and flexible connectors associated with the pipe originating at the storage tank up to the:
 - (a) Union of the integral piping with the dispenser;
 - (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;
 - (d) First flange or connection within the loading rack containment area, or
 - (e) First shoreside valve after the marine transfer area for on-site piping at bulk product facilities.
- (40) "Integrity test" means a determination of the liquid tightness of a storage tank system or system component using one of the following types of tests:
 - (a) "Interstitial integrity test" means an evaluation of a storage tank system or system component with an interstitial space using

vacuum, pressure, liquid level monitoring systems, or equivalent test methods certified by a Nationally Recognized Testing Laboratory;

- (b) "Primary integrity test" means an evaluation of the liquid tightness of the primary tank or integral piping, or
- (c) "Containment integrity test" means an evaluation of the liquid tightness of hydrant pits, isolation valve pits, and other containment systems.
 - (41) "Interstice" means the space between the primary and secondary wall of a storage tank system or system component.
- (42) "Interstitial monitoring" is a method of release detection in which the area between the primary and secondary wall of a storage tank or storage tank system component is monitored for signs of release.
- (43) "Limited Closure Report" means Limited Closure Report Form for ASTs 62-762.901(8), incorporated by reference in subsection 62-762.421(2), F.A.C.
- (44) "Liner" means an impervious material that meets the performance requirements of subparagraph 62-762.501(1)(b)2. or 62-762.502(1)(b)2., F.A.C., that is used externally as a method of secondary containment.
- (45) "Maintenance" means the normal operational upkeep in accordance with Rules 62-762.701 and 62-762.702, F.A.C., to prevent a storage tank system or system component from releasing or discharging regulated substances.
 - (46) "Mobile tank" is a shop fabricated storage tank that is:
 - (a) Moved to a different location at least once every 180 days; and,
- 1. Has a current valid vehicle registration with the Florida Department of Highway Safety and Motor Vehicles and has current test and inspection markings in accordance with 49 C.F.R. §180.415, or
- 2. Is designed and constructed to be moved to other service locations, and its relocation within a facility or from site to site is inherent in its use.
- (b) Used for on-site construction activities, provided that the construction activities do not exceed 12 months, or the life of the construction project as long as construction is continuous, and the tanks are removed from the site when the construction is complete.
- (c) Not considered mobile if it is connected to stationary underground or aboveground integral piping, unless associated with the production of an agricultural commodity, provided that the tank is moved to a different location at least once every 180 days.
- (47) "Nationally Recognized Testing Laboratory" means an international or national organization or governmental entity 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 requirements of this chapter. A Nationally Recognized Testing Laboratory shall have at least five years of professional storage tank system equipment testing experience.
 - (48) "New" means a storage tank system or system component installed after January 11, 2017.
- (49) "Onsite" means on the same or geographically contiguous property as the facility regulated under this chapter that is under the same ownership or control. The properties may be divided by a public or private right-of-way or an easement.
- (50) "Operability test" means a test performed to determine if electronic and mechanical release detection, and overfill protection devices or systems are functioning as designed and in accordance with manufacturer's specifications.
- (51) "Out-of-service" means a storage tank system or system component that is designated as out-of-service by the owner or operator to the Department on Storage Tank Facility Registration Form 62-762.901(2), incorporated by reference in paragraph 62-762.401(1)(b), F.A.C.
 - (52) "Overfill" is an incident that occurs when a tank is filled beyond its capacity.
- (53) "Overfill protection" is a device or method for preventing an incident, release, or discharge from a storage tank during filling of the storage tank system.
- (54) "Pesticides" means any substance or mixture of substances, as defined in Section 487.021, F.S., intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, weeds, or other forms of plant or animal life or viruses, except viruses, bacteria, or fungi on or in living humans or other animals, which the Department of Agriculture and Consumer Services by rule declares to be a pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; however, the term "pesticide" does not include any article that:
 - (a) Is a "new animal drug" within the meaning of s. 201(w) of the Federal Food, Drug, and Cosmetic Act;
- (b) Has been determined by the Secretary of the United States Department of Health and Human Services not to be a new animal drug by a regulation establishing conditions of use for the article, or
 - (c) Is an animal feed within the meaning of s. 201(x) of the Federal Food, Drug, and Cosmetic Act bearing or containing an

article covered in this subsection.

- (55) "Pipe" or "piping" means any hollow cylindrical or tubular conveyance through which regulated substances flow.
- (56) "Pipeline facilities" are pipe systems, rights-of-way and any associated equipment, gathering lines, buildings, or break-out tanks necessary for the long range transportation of regulated substances. Pipeline facilities and associated equipment are regulated by the U.S. Department of Transportation Pipeline and Hazardous Material Safety Administration, pursuant to Title 49, Parts 190-199 of the Code of Federal Regulations.
- (57) "Piping sump" means a storage tank system component installed as secondary containment or a monitoring port at the lowest point in the integral piping to detect releases.
- (58) "Pressure test" means a test to determine the integrity of the primary integral piping performed in accordance with Rules 62-762.601 and 62-762.602, F.A.C.
 - (59) "Pressurized piping" means piping through which regulated substances are pumped under continuous pressure.
- (60) "Product" 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.
- (61) "Registration form" means Storage Tank Facility Registration Form 62-762.901(2), incorporated by reference in paragraph 62-762.401(1)(b), F.A.C.
- (62) "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 when stored in a storage tank.
- (63) "Release" means a loss of regulated substances from a storage tank system or system component into the system's secondary containment.
- (64) "Release detection" means a method of detecting the presence of regulated substances within a storage tank system's or system component's secondary containment or detecting other conditions or situations indicative of a release or discharge.
- (65) "Repair" means to restore or replace any defective or damaged parts of a storage tank system or system component in accordance with subsections 62-762.701(1) and 62-762.702(1), F.A.C., as applicable. Replacement of a non-defective part is not a repair.
- (66) "Residential storage tank system" means a storage tank system that provides fuel for heating, air conditioning or electricity to a residential structure. That structure is a non-commercial building utilized exclusively as a dwelling unit that is used as a home or residence by one or more persons who maintain a common household, excluding transient occupancies.
- (67) "Secondary containment" means a release detection and discharge prevention system that meets the performance requirements of paragraphs 62-762.501(1)(b) and 62-762.502(1)(b), F.A.C., as applicable. Secondary containment includes dispenser sumps, piping sumps, spill containment systems, the outer wall of double-walled tanks, and integral piping, or the liner or impervious containment for single-walled tanks or integral piping. A Release Prevention Barrier, as specified in API Standard 650, 12th Edition, Annex I, Welded Tanks for Oil Storage, Undertank Leak Detection and Subgrade Protection, includes Errata 1 (2013), Errata 2 (2014), and Addendum 1 (2014), March 2013, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/, is considered secondary containment for field-erected storage tank bottoms.
- (68) "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.
- (69) "Shop-fabricated storage tank" means a storage tank that is constructed at the tank manufacturer's plant and transported to the facility for installation.
- (70) "Small diameter piping" means integral piping with an internal diameter of three inches or less that is utilized for transporting regulated substances.
- (71) "Spill containment system" means a fixed component that is designed to prevent a discharge of regulated substances from the tank fill pipe.
- (72) "Storage tank system" means a tank used to contain regulated substances, and all its components, including integral piping, dispensers, spill containment systems, overfill protection systems, secondary containment systems, and any associated release detection equipment. A storage tank system is a "storage system" as defined in Section 376.301, F.S.

- (73) "Storage tank system component" or "system component" means any part (mechanical, electrical, and plumbing) of the storage tank system that is necessary for a tank system to operate properly and safely. This includes tanks, integral piping, sensors, sumps, pumps, including dispensers, spill containment systems, overfill protection systems, secondary containment systems, and any associated release detection equipment.
- (74) "Suction piping" means piping through which regulated substances flow by suction due to a pump located at the dispenser or other endpoint of the piping.
- (75) "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 less than ten percent buried beneath the surface of the ground.
- (76) "Temporary out-of-service" means a field erected storage tank system that is designated as temporary out-of-service by the owner or operator to the Department on Form 62-762.901(2), incorporated by reference in paragraph 62-762.401(1)(b), F.A.C.
- (77) "Vapor Corrosion Inhibitor" (VCI) means a chemical substance that volatilizes from a liquid or solid that is designed to inhibit corrosion within an enclosed airspace.

Rulemaking Authority 376.303 FS. Law Implemented 376.031, 376.301, 376.303 FS. History-New 6-21-04, Amended 1-11-17.

62-762.211 Reference Guidelines.

- (1) Reference guidelines listed in paragraphs 62-762.211(2)(a) through (n), F.A.C., are available for inspection during business hours at the Department of Environmental Protection's Tallahassee Office located at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and directly from the source. Secondary references found within the following primary reference guidelines that have insufficient information to obtain those references can be obtained as provided in the document titled Appendix A - Secondary References. April 2016, hereby adopted and incorporated by reference, located http://www.flrules.org/Gateway/reference.asp?No=Ref-07688, or the Department address listed above. All other secondary references can be obtained through the following reference guidelines.
- (2) Titles of documents. References to documents listed in paragraphs 62-762.211(2)(a) through (n), F.A.C., below are made throughout this chapter. Each document or part thereof is adopted and incorporated by reference only to the extent that it is specifically referenced in this chapter. To the extent that the provisions contained in the following reference guidelines conflict with this chapter, the Department's requirements as stated in this chapter shall control.
 - (a) American Concrete Institute (ACI):
 - 1. Control of Cracking in Concrete Structures, ACI 224R-01, (Reapproved 2008); and,
 - 2. Design Considerations for Environmental Engineering Concrete Structures, ACI 350.4R-04, 2004 Edition.
- (b) American Petroleum Institute (API). Copies of the following documents are available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/:
 - 1. Specification for Fiberglass Reinforced Plastic Tanks, API Spec 12P, 3rd Edition, October 2008,
- 2. Piping Inspection Code: In-service Inspection, Repair, and Alteration of Piping Systems, API 570, 3rd Edition, November 2009.
 - 3. Design and Construction of Large, Welded, Low-Pressure Storage Tanks, API Std 620, 12th Edition, October 2013,
- 4. Welded Tanks for Oil Storage, API Std 650, 12th Edition, Includes Errata 1 (2013), Errata 2 (2014), and Addendum 1 (2014), March 2013,
 - 5. Cathodic Protection of Aboveground Petroleum Storage Tanks, API RP 651, 4th Edition, September 2014,
 - 6. Tank Inspection, Repair, Alteration, and Reconstruction, API Std 653, 5th Edition, November 2014,
- 7. Welding of Pipelines and Related Facilities, API Std 1104, 21st Edition, Includes Errata 1 (2013), Errata 2 (2014), Errata 3 (2014), and Addendum 1 (2014), September 2013,
- 8. Recommended Practice for the Pressure Testing of Steel Pipelines for the Transportation of Gas, Petroleum Gas, Hazardous Liquids, Highly Volatile Liquids, or Carbon Dioxide, API RP 1110, 6th Edition, February 2013,
- 9. Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems, API RP 1632, 3rd Edition, May 1996, (Reaffirmed, June 2002),
- 10. Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals, API RP 1637, 3rd Edition, July 2006 (Reaffirmed, May 2012). Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688; and,

- 11. Overfill Protection for Storage Tanks in Petroleum Facilities, API RP 2350, 4th Edition, May 2012.
- (c) ASME International (founded as the American Society of Mechanical Engineers). A copy of the following document is available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at ASME International, 22 Law Drive, Box 2900, Fairfield, New Jersey 07007-2900, (800)843-2763, or the publisher's website at http://www.asme.org/:
 - 1. Process Piping, ASME B31.3, 2014 Edition; and,
 - 2. Pipeline Transportation Systems for Liquids and Slurries, ASME B31.4, 2012 Edition.
- (d) Energy Institute. A copy of the following document is available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at Energy Institute, 62 New Cavendish Street, London W1G 7AR, United Kingdom, +44 (0) 20 7467 7100, or the publisher's website at https://www.energyinst.org/home: *Identification Markings for Dedicated Aviation Fuel Manufacturing and Distribution Facilities, Airport Storage and Mobile Fuelling Equipment*, EI 1542, 9th Edition, July 2012.
- (e) Florida Department of Environmental Protection (DEP). A copy of the following document is available at the Department located at 2600 Blair Stone Road, Tallahassee, Florida 32399, (850)245-8705, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference, or at the following website location: http://www.flrules.org/Gateway/reference.asp?No=Ref-07699, Instructions for Conducting Sampling During Aboveground Storage Tank Closure, April 2016 Edition.
- (f) Geosynthetic Institute. A copy of the following document is available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at Geosynthetic Institute, 475 Kedron Avenue, Folsom, Pennsylvania 19033-1208, (610)522-8440, or at http://www.geosynthetic-institute.org/. *Test Methods, Test Properties and Testing Frequency for High Density Polyethylene (HDPE) Smooth and Textured Geomembranes*, GRI Test Method GM13, Rev. 13, November 2015. Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688.
- (g) NACE International. Copies of the following documents are available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NACE International, 1440 South Creek Drive, Houston, Texas 77084-4906, (800)797-6223, or at http://www.nace.org/:
- 1. External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms, NACE Standard RP0193-2001, 2001 Edition,
- 2. Control of External Corrosion on Underground or Submerged Metallic Piping Systems, NACE Standard SP0169-2013 (formerly RP0169), 2013 Edition,
- 3. External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection, NACE Standard SP0285-2011, 2011 Edition; and,
- 4. Coatings and Linings over Concrete for Chemical Immersion and Containment Service, NACE Standard SP0892-2007 (formerly RP0892), 2007 Edition.
- (h) National Fire Protection Association (NFPA). Copies of the following documents are available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NFPA, 1 Batterymarch Park, Quincy, Massachusetts 02169, (617)770-3000, or at www.nfpa.org/:
 - 1. Flammable and Combustible Liquids Code, NFPA 30, 2015 Edition,
 - 2. Motor Fuel Dispensing Facilities and Repair Garages, NFPA 30A, 2015 Edition,
 - 3. Standard on Explosion Protection by Deflagration Venting, NFPA 68, 2013 Edition,
 - 4. Standard on Explosion Prevention Systems, NFPA 69, 2014 Edition; and,
 - 5. Standard on Types of Building Construction, NFPA 220, 2015 Edition.
- (i) National Institute of Standards and Technology (NIST), NIST, 100 Bureau Drive, Stop 1070, Gaithersburg, Maryland 20899-1070, (301)975-6478, or at http://www.nist.gov/index.html.
- (j) Petroleum Equipment Institute (PEI). Copies of the following documents are available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at PEI, Post Office Box 2380, Tulsa, Oklahoma 74101-2380, (918)494-9696, or at www.pei.org/:
 - 1. Recommended Practices for Installation of Underground Liquid Storage Systems, PEI/RP100-11, 2011 Edition,
- 2. Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling, PEI/RP200-13, 2013 Edition; and,
- 3. Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities, PEI/RP1200-12, 2012 Edition.

- (k) SSPC: The Coatings Society and NACE International. A copy of the following document is available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at SSPC: The Coatings Society, 40 24th Street, 6th Floor, Pittsburgh, Pennsylvania 15222-4643, (877)281-7772, or from the publisher's website at http://www.sspc.org/; or from the publisher at NACE International, 1440 South Creek Drive, Houston, Texas 77084-4906, or from the publisher's website at http://www.nace.org/: Design, Installation, and Maintenance of Coating Systems for Concrete Used in Secondary Containment, SSPC-TU 2/NACE 6G197, Publication No. 97-04/Item No. 24193, February 1997.
- (l) Steel Tank Institute (STI). Copies of the following documents are available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at STI, 944 Donata Court, Lake Zurich, IL 60047, (847)438-8265, or at https://www.steeltank.com/:
- 1. Flameshield® Standard for Fire Tested Tanks, STI F001, October 2014. Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688;
- 2. Generator Base Tanks: Standard for Aboveground Tanks Used as a Generator Base Tank, STI F011, October 2014. Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688;
 - 3. Standard for Aboveground Tanks with Integral Secondary Containment, STI F921®, Revised October 2014;
- 4. Fireguard: Specification for Fireguard Protected Aboveground Storage Tanks, STI F941, May 2015. Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688;
- 5. Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems, STI R892, Revised January 2006;
- 6. Installation Instructions for Shop Fabricated Aboveground Storage Tanks for Flammable, Combustible Liquids, STI R912, Revised November 2015. Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688;
 - 7. Standard for the Inspection of Aboveground Storage Tanks, STI SP001, 5th Edition, Revised 2011; and,
 - 8. Standard for Repair of Shop Fabricated Aboveground Tanks, STI SP031, 4th Edition, November 2008.
- (m) Underwriters' Laboratories Standards (UL). Copies of the following documents are available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at UL, 333 Pfingsten Road, Northbrook, Illinois 60062-2096, (847)272-8800, or at www.ul.com/:
- 1. Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, UL 142, Revised August 2014, 9th Edition. Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688;
- 2. Nonmetallic Underground Piping for Flammable Liquids, UL 971, March 2006, 2nd Edition. Secondary references to this guideline can be found here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07688; and,
 - 3. Standard for Protected Aboveground Tanks for Flammable and Combustible Liquids, UL 2085, December 1997, 2nd Edition.
- (n) U.S. Government Printing Office, Federal Digital System, Code of Federal Regulations, Electronic Code of Federal Regulations. Copies of the following documents are available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at U.S. Government Printing Office, 732 North Capitol Street, NW, Washington, DC 20401-0001, (202)512-1800, or at www.gpo.gov/:
- 1. Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST), 40 C.F.R. Part 280, July 15, 2015, published by Government Printing Office, Code of Federal Regulations, 732 North Capitol Street, NW, Washington, DC 20401-0001, or http://www.flrules.org/Gateway/reference.asp?No=Ref-07664, or http://www.ecfr.gov/cgi-bin/ECFR?page=browseprevious&pitd=00000000&SID=b4aa1b4450ccd422c899ad31b3659271; and,
- 2. Designation of Hazardous Substances 40 CFR Section 302.4, August 1989, published by Government Printing Office, Code Federal Regulations, 732 North Capitol Street, NW, Washington, 20401-0001, of DC http://www.flrules.org/Gateway/reference.asp?No=Ref-07663, http://www.ecfr.gov/cgi-bin/textor idx?tpl=/ecfrbrowse/Title40/40cfr302 main 02.tpl.
- (3) Applicability of Reference Guidelines: Storage tank systems or system components installed after January 11, 2017, shall comply with this chapter on or after January 11, 2017. Unless otherwise specified in this chapter, storage tank systems or system components installed before January 11, 2017, are subject to the applicable Reference Standards listed in the Department's storage tank rules that were in effect at the time the storage tank systems or system components were installed.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Amended 1-11-17.

62-762.301 Applicability.

- (1) General Requirements.
- (a) The requirements of this chapter, unless specified otherwise, apply to owners and operators of facilities, and owners and operators of storage tank systems with individual storage tank capacities greater than 550 gallons, that contain or contained regulated substances. Storage tank systems or system components installed after January 11, 2017, shall comply with this chapter upon installation. Unless otherwise specified in this chapter, storage tank systems or system components installed before January 11, 2017, are subject to the applicable Reference Standards listed in the Department's storage tank rules that were in effect at the time the storage tank systems or system components were installed.
- (b) Owners and operators of compression vessels and hazardous substance storage tank systems with capacities of greater than 110 gallons and containing hazardous substances above reportable quantites under Designation of Hazardous Substances 40 C.F.R. Section 302.4, August 1989, published by Government Printing Office, Code of Federal Regulations, 732 North Capitol Street, N.W., Washington, DC 20401-0001, hereby adopted and incorporated by reference, and available at the address given, or http://www.flrules.org/Gateway/reference.asp?No=Ref-07663, or http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr302_main_02.tpl, or at the Department address listed in subsection 62-762.211(1), F.A.C., are only required to comply with Rule 62-762.401, F.A.C. Owners and operators of storage tanks that contain hazardous substances consisting of ammonia and chlorine are required to comply with paragraph (1)(a), above.
- (c) Owners and operators of facilities containing only mineral acid storage tank systems and owners and operators of mineral acid storage tank systems with capacities of greater than 110 gallons containing mineral acids are only required to comply with Rule 62-762.891, F.A.C.
 - (2) Exemptions: The following 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 dilutent 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. "Heating oil" means any petroleum based fuel used in the operation of heating equipment, boilers, or furnaces;
 - (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 Liquefied Petroleum Gas;
 - (i) Any storage tank system that:
- 1. Contains regulated substances at a concentration of less than two percent for pollutants and below the reportable quantities for hazardous substances under 40 CFR Section 302.4, August 1989; and,
 - 2. Was never previously regulated under Sections 376.30 through 376.309, F.S., or this chapter.
- (j) Any storage tank system that contains wastewater 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, including oil-water separator tanks;
 - (m) Any residential storage tank system;
- (n) Any emergency spill or emergency overflow containment storage tank systems, including those associated with electric power generation systems, that are emptied as soon as possible after use, and that routinely remains empty;
 - (o) Any day tank system;
- (p) 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. Piping used to return unused regulated substances from the process, production, or manufacturing point of use back to the storage tank system is considered part of this exemption;
- (q) 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.; however, this exclusion does not apply to storage tanks that contain refined products;

- (r) Any equipment or machinery that contains regulated substances for operational purposes, such as hydraulic lift or fluid tank systems and that hold hydraulic fluid for closed-loop mechanical systems used to operate lifts, elevators, and other similar devices, and dielectric fluid (cooling and lubricating oil) systems used for electrical equipment;
 - (s) Any pipeline facilities;
- (t) 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 CFR Part 50, Appendix A;
 - (u) Any vapor recovery holding tanks and associated vapor recovery piping systems;
- (v) Any rail or tanker truck loading or unloading operations (loading racks) specified in Chapter 28 of NFPA 30, 2015 Edition, Flammable and Combustible Liquids Code, Bulk Loading and Unloading Facilities for Tank Cars and Tank Vehicles, incorporated by reference in paragraph 62-762.201(36)(a), F.A.C.;
 - (w) Any irrigation systems that:
 - 1. Are not in contact with the soil,
 - 2. Are constructed of corrosion resistant materials,
 - 3. Are compatible with the products stored,
 - 4. Contain less than 80 percent concentration of fertilizer materials by volume; and,
 - 5. Are applied onsite.
 - (x) Systems used exclusively for the storage of aqueous solutions of sodium hypochlorite;
 - (y) Any mobile tank;
 - (z) Any system located entirely within an industrial occupancy building;
- (aa) Any storage tank system, that was installed before July 13, 1998, and is located entirely within an enclosed building or vault with an adequate roof and walls to prevent rainwater from reaching the system, and with an impervious floor containing no valves, drains, or other openings that would permit regulated substances to be discharged from the system;
- (bb) Any double-walled storage tank, that is connected with a power module system that is used for the emergency or supplemental generation of electrical power by an electric utility as defined in Chapter 366, F.S. This exemption is limited to storage tanks that are designed and constructed to be moved between service locations, relocated within a facility or where the inherent use is from site to site;
- (cc) Docklines transferring regulated substances from the marine transfer area to the bulk product facility provided the docklines are not integral piping of the regulated bulk product facility;
- (dd) Any storage tank system containing biofuels with a concentration of regulated substances of five percent or less by volume, or
- (ee) Any multiple compartmented storage tank system where each compartment does not share any of its walls with another compartment and the maximum capacity of each compartment is equal to or less than 550 gallons.

Rulemaking Authority 376.303, 376.322(3) FS. Law Implemented 376.303, 376.321, 376.322(3) FS. History-New 6-21-04, Amended 1-11-17.

62-762.401 Facility Registration.

- (1) For installations:
- (a) For the purposes of this subsection, installation shall mean the date that the storage tank system or system component placement or construction begins.
- (b) For new facilities, which are facilities that began construction after January 11, 2017, a completed Form 62-762.901(2), Storage Tank Facility Registration Form (Registration Form), effective date, January 2017, hereby adopted and incorporated by reference, shall be submitted in electronic or paper format to the Department no later than 30 days prior to installation. For facilities with existing registered storage tank systems, a completed Registration Form shall be submitted in electronic or paper format to the Department no later than seven days prior to regulated substances being put into any new storage system. The Department encourages the electronic submittal of the Registration Form available online here: http://www.fldepportal.com/go/submit-registration/, or to obtain copies of the form see Rule 62-762.901, F.A.C., or http://www.flrules.org/Gateway/reference.asp?No=Ref-07695, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
- (2) For a change in service status or closure pursuant to Rules 62-762.801 and 62-762.802, F.A.C., a completed Registration Form shall be submitted in paper or electronic format to the Department within 10 days after completion of the change in service

status or closure.

- (3) A completed Registration Form shall be submitted to the Department in paper or electronic format within 10 days of the following changes or discovery:
 - (a) Any change in the owner or operator of a facility or of a storage tank system;
- (b) Any change or correction in the information reported in the Registration Form. A change within the same blend of regulated substances should not be reported (e.g., regular unleaded to premium unleaded gasoline); and,
 - (c) The discovery of an unregistered storage tank system.
 - (4) Registration fees.
- (a) Registration fees are due from the tank or facility owner or operator, as indicated in this section, for all storage tank systems and compression vessels, required to be registered, except for:
- 1. Storage tank systems and compression vessels that have been properly closed in accordance with subsections 62-762.801(2) and 62-762.802(3), F.A.C.; and,
 - 2. Storage tank systems and compression vessels at federally-owned or operated facilities.
- (b) A fee of \$50.00 per storage tank or compression vessel shall be submitted for each initial registration of a storage tank system or compression vessel. The fee shall be paid within 30 days after receipt of an invoice by the Department.
- (c) A renewal fee of \$25.00 for each storage tank with a capacity of 250,000 gallons or less and for each compression vessel shall be paid to the Department by July 1 each year.
- (d) A renewal fee of one dollar per every 10,000 gallons of storage capacity for each storage tank with a storage capacity greater than 250,000 gallons, shall be paid to the Department each year, not to exceed \$1,000.00 per storage tank.
- (e) A fee of \$25.00 per storage tank shall be paid to the Department for each storage tank or compression vessel that is replaced within 30 days after receipt of an invoice by the Department.
- (f) A late fee of \$20.00 per storage tank or compression vessel shall be paid to the Department for any renewal that is received after July 31.
- (g) In no circumstance will the owner or operator of any facility pay an annual fee greater than \$5,000.00 for all regulated substance storage tanks located at the facility.
- (h) In no circumstance will the owner or operator of any facility pay an annual fee greater than \$2,500.00 for all registered compression vessels and hazardous substance storage tanks located at the facility.
- (i) Upon receipt of payment of all applicable registration fees, each facility shall receive a registration placard, pursuant to Section 376.3077, F.S. The placard shall be displayed in plain view in the office, kiosk, or at another suitable location at the facility where the storage tank system is located. Posted on the Department website will be information regarding those motor fuel facilities who have delinquent registration fees. To access this information go to: https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
- (5) Unless a valid registration placard is displayed in plain view as required by paragraph 62-762.401(4)(i), F.A.C., no motor fuel may be deposited into a storage tank required to be registered pursuant to this rule. Facility owners, operators, and suppliers are each responsible for compliance with this provision. For the purposes of this rule, motor fuels mean petroleum products, including petroleum products blended with biofuels, used for the operation of a motor or engine.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History–New 6-21-04, Amended 1-11-17. Editorial Note: Portions of this rule were relocated to Rule 62-762.421, F.A.C.

62-762.411 Notification.

- (1) For Installations:
- (a) For the purposes of this subsection, installation shall mean the date that the storage tank system or system component placement or construction will begin.
- (b) Notification shall be received by the County in writing or electronic format between 30 and 45 days before installation of a storage tank system or system component unless the County agrees to a shorter time period.
- (c) Notification shall also be received by the County in writing or electronic format between 48 and 72 hours prior to the installation work to confirm the date and time of the scheduled activities.
 - (2) For change in service status and closure:
 - (a) Notification shall be received by the county in writing or electronic format between 30 and 45 days before the initiation of

the work related to the change in service status or closure unless the county agrees to a shorter time period.

- (b) Notification shall also be received by the county in writing or electronic format between 48 and 72 hours prior to the initiation of the work related to the change in service status or closure to confirm the date and time of the scheduled activities.
- (c) A Closure Integrity Evaluation Report Form for ASTs 62-762.901(7), (Closure Integrity Report), effective date, January 2017, hereby adopted and incorporated by reference, as prepared in accordance with paragraph 62-762.801(3)(a) or 62-762.802(4)(a), F.A.C., must be provided to the county with the notification of closure. To obtain copies of this form see Rule 62-762.901, F.A.C., or https://www.flrules.org/Gateway/reference.asp?No=Ref-07693, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
- (3) Internal Inspections. Notification shall be received by the county in writing or electronic format between 10 and 25 days before the initiation of the work unless the county agrees to a shorter time period for inspections in accordance with *Tank Inspection*, *Repair, Alteration, and Reconstruction*, API Std 653, 5th Edition, November 2014, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/; and for piping integrity testing pursuant to *Piping Inspection Code: In-service Inspection, Repair, and Alteration of Piping Systems*, API 570, 3rd Edition, November 2009, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/. Smaller field erected tanks with capacities less than 250,000 gallons shall be inspected in accordance with API Std 653, November 2014; or *Standard for the Inspection of Aboveground Storage Tanks*, STI SP001, 5th Edition, Revised 2011, hereby adopted and incorporated by reference and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at STI, 944 Donata Court, Lake Zurich, IL 60047, (847)438-8265, or at https://www.steeltank.com/. Notification is not required for any STI SP001, Revised 2011, API Std 653, November 2014, and API 570, November 2009, inspection work or activities where the tank or piping will remain in service or will not be empty, or for routine maintenance.
- (4) Notification of the discovery of an incident shall be made to the County in writing or electronic format on Form 62-762.901(6), Incident Notification (INF), effective date, January 2017, hereby adopted and incorporated by reference, within 72 hours of the discovery or close of the County's next business day; however, an INF need not be submitted if, within 72 hours of discovery, the investigation of the incident in accordance with Rule 62-762.431, F.A.C., confirms that a discharge did or did not occur. To obtain copies of this form see Rule 62-762.901, F.A.C., or https://www.flrules.org/Gateway/reference.asp?No=Ref-07692, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
- (5) Except as provided in subsection 62-762.441(5), F.A.C., notification of the discovery of a discharge shall be made to the County in writing or electronic format on Form 62-762.901(1), Discharge Report Form (DRF), effective date, January 2017, hereby adopted and incorporated by reference, within 24 hours or before the close of the County's next business day. To obtain copies of this form see Rule 62-762.901, F.A.C., or http://www.flrules.org/Gateway/reference.asp?No=Ref-07689, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
- (6) Notification is not required for Temporary Out-of-Service or for minor repairs to gauges, vents, or other equipment that is attached to the top of a storage tank.

Rulemaking Authority 376.303 FS. Law Implemented 376.30, 376.303 FS. History–New 1-11-17. Editorial Note: Portions of this rule were copied from Rule 62-762.451, F.A.C.

62-762.421 Financial Responsibility.

- (1) Financial responsibility is the ability to pay for cleanup of a discharge and third-party liability resulting from a discharge of petroleum or petroleum product at the facility.
- (2) Financial responsibility shall be maintained and demonstrated to the County or Department for all storage tank systems until the storage tank systems are properly closed pursuant to subsections 62-762.801(2) and (3), and 62-762.802(3) and (4), F.A.C., and the Closure Report or the Limited Closure Report Form for ASTs 62-762.901(8), effective date, January 2017, hereby adopted and incorporated by reference, is submitted to and approved by the County or the Department. To obtain copies of Form 62-762.901(8), see Rule 62-762.901, F.A.C., or http://www.flrules.org/Gateway/reference.asp?No=Ref-07696, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference. Pursuant to Section 376.309(1), F.S., the facility owner is required to establish and maintain evidence of financial responsibility and is liable in

event of noncompliance. If the facility owner, facility operator, tank owner, and tank operator are separate persons, then evidence of financial responsibility may be demonstrated if one of those persons obtains financial responsibility on behalf of the facility owner.

- (3) The demonstration of financial responsibility for storage tank systems shall be made in accordance with reference guideline Technical Standards And Corrective Action Requirements For Owners And Operators Of Underground Storage Tanks (UST), Financial Responsibility, 40 C.F.R. Part 280, Subpart H, July 15, 2015, hereby adopted and incorporated by reference and available from the publisher at the Government Printing Office, Code of Federal Regulations, 732 North Capitol Street, N.W., Washington, http://www.ecfr.gov/cgi-20401-0001, http://www.flrules.org/Gateway/reference.asp?No=Ref-07664, DC bin/ECFR?page=browseprevious&pitd=00000000&SID=b4aa1b4450ccd422c899ad31b3659271, or the Department address located in subsection 62-762.211(1), F.A.C. However, Department Form 62-761.900(3) effective date, January 2017, Financial Mechanisms for Storage Tanks, hereby adopted and incorporated by reference, and available in Rule 62-761.900, F.A.C., or http://www.flrules.org/Gateway/reference.asp?No=Ref-07661, the Department's https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference, can be used in lieu of the United States Environmental Protection Agency's financial mechanisms; except that:
- (a) For a facility with a storage tank system or systems with a cumulative capacity greater than 550 gallons and less than or equal to 10,000 gallons, the demonstration of financial responsibility for cleanup of a discharge and third-party liability shall be a minimum of \$500,000.00 per incident, and \$1,000,000.00 million annual aggregate.
- (b) For a facility with a storage tank system or systems with a cumulative capacity greater than 10,000 gallons and less than or equal to 30,000 gallons, the demonstration of financial responsibility for cleanup of a discharge and third-party liability shall be a minimum of \$1,000,000.00 million per incident, and \$1,000,000.00 million annual aggregate.
- (c) For a facility with a storage tank system or systems with a cumulative capacity greater than 30,000 gallons and less than or equal to 250,000 gallons the demonstration of financial responsibility for cleanup of a discharge and third-party liability shall be a minimum of \$1,000,000.00 million per incident, and \$2,000,000.00 million annual aggregate.
- (d) For a facility with a storage tank system or systems with a cumulative capacity greater than 250,000 gallons, the demonstration of financial responsibility for cleanup of a discharge and third-party liability shall be a minimum of \$3,000,000.00 million per incident, and \$6,000,000.00 million annual aggregate.
- Holders of financial responsibility mechanisms and facility owners are encouraged to permanently maintain evidence of financial responsibility and all correspondence with respect to coverage and claims.
- (4) The appropriate part(s) of Form 62-761.900(3) shall be used when demonstrating proof of financial responsibility under this Rule, and will satisfy the Certification of Financial Responsibility requirements of 40 C.F.R. 280.111(b)(11), July 15, 2015. Facility owners shall ensure that copies of the current financial responsibility document(s) are available for inspection at the facility where the storage tank system(s) is located or at their place of business. Records kept off-site shall be made available for inspection by the Department or County within five business days from the receipt of the Department's or County's request.
- (5) Financial requirements for the purpose of this rule, regardless of the date of installation of storage tank systems, shall comply with 40 C.F.R. Part 280, Subpart H, July 15, 2015.
- (6) Notwithstanding the facility owner's financial responsibility status, those persons specified in Section 376.308(1), and Sections 403.141 and .161, F.S., shall be liable for any discharge at the facility.
 - (7) Financial responsibility mechanisms may not include choice of law and venue in favor of jurisdictions other than Florida.

Rulemaking Authority 376.303 FS. Law Implemented 376.303, 376.308, 376.309, 403.091, 403.141, 403.161 FS. History-New 1-11-17. Editorial Note: Portions of this rule were copied from Rule 62-762.401, F.A.C.

62-762.431 Incidents.

- (1) Incidents include:
- (a) The following positive responses of release detection devices or methods described in Rules 62-762.601 and 62-762.602, F.A.C.:
- 1. Any visual inspection of any part of a storage tank system, dispenser, pipe, valve, pump, or other wetted portion of the system containing regulated substances that reveals uncontrolled pitting corrosion, structural damage, leakage, or other similar problems,
 - 2. Any visual observation of regulated substances in a containment sump,
- 3. Any alarm that indicates that liquid, vacuum, or pressure monitoring levels are not being maintained; or that liquid, other than condensate, has been detected by a sensor in a normally dry interstice,

- 4. Any visual observation that indicates that liquid level hydrostatic monitoring levels are not being maintained,
- 5. Any complete loss of vacuum or a 50 percent change in pressure from one month to the next, or any change in pressure exceeding 50 percent of the initial level or of a pressure level that is reestablished at the time of an incident investigation or annual testing of the gauge,
 - 6. Any visual inspection that indicates the presence of water, other than condensate, or regulated substances in the interstice,
 - 7. Any instance where a mechanical line leak detector is restricting flow,
 - 8. Any instance where an electronic line leak detector has shut off power to the pump; and,
 - 9. Any instance where a monitoring device has shut off the pump.
 - (b) A failed integrity test for the following components:
 - 1. Double-bottomed field erected storage tanks,
 - 2. Double-walled integral piping,
 - 3. Hydrant sumps; and,
 - 4. Spill containment systems.
- (c) The presence of odors of regulated substances 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;
- (d) The loss of regulated substances 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;
 - (e) The loss of a regulated substance exceeding 500 gallons inside a dike field area with secondary containment; and,
 - (f) A failed Closure Integrity Evaluation.
- (2) If an incident occurs at a facility, actions shall be initiated within 24 hours of discovery to investigate the incident to determine if a discharge has occurred.
- (3) Notification of the discovery of any incident shall be made to the county on an INF in writing or electronic format within 72 hours of the discovery or before the close of the county's next business day. However, an INF is not required to be submitted if, within 72 hours of discovery, the investigation of the incident confirms that a discharge did or did not occur.
- (4) In cases where an INF is required to be submitted, the investigation shall be completed within 14 days of the date of discovery of the incident to determine if a discharge has occurred. Incident investigations that require additional time can be extended with the written approval of the Department or the county. However, if the investigation goes beyond 45 days of the date of discovery, the storage tank system or system component shall be placed out-of-service until such time the investigation is completed and resolved.
- (5) At the end of the 14 day time period to investigate the incident, or at the end of an alternate time period approved by the Department or the county, a determination must be made as to whether the incident was a discharge. If the incident was a discharge, then a DRF shall be submitted in writing or electronic format to the county. If the incident was not a discharge, then a written confirmation and explanation that the incident was not a discharge shall be submitted in writing or electronic format to the county.
- (6) The removal of any release of regulated substances into secondary containment shall be initiated within three days of discovery, and completed within 30 days of discovery.
- (7) If a discharge is discovered at any time during the incident investigation, the discharge shall be reported on a DRF in writing or electronic format, within 24 hours of discovery or before the close of the next business day, and a discharge response shall be initiated in accordance with subsection 62-762.441(6), F.A.C.
- (8) All incidents, as identified in subsection 62-762.431(1), F.A.C., regardless of whether an INF is required to be submitted, shall be documented and records kept until storage tank system closure in accordance with Rule 62-762.711, F.A.C. Test results or reports, which support the investigation findings, shall be maintained as records.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 1-11-17. Editorial Note: Portions of this rule were copied from Rule 62-762,821, F.A.C.

62-762.441 Discharges.

- (1) Discharges include:
- (a) Laboratory analytical results of surface water or groundwater samples indicating the presence of contamination by regulated substance contaminants of concern listed in Table B in Chapter 62-780, F.A.C., that exceed the groundwater or surface water

Cleanup Target Levels in Chapter 62-777, F.A.C.;

- (b) Laboratory analytical results of soil samples indicating the presence of contamination by regulated substance contaminants of concern listed in Table B in Chapter 62-780, F.A.C., that exceed the lower of direct exposure residential or leachability based on groundwater criteria cleanup target levels in Chapter 62-777, F.A.C.;
- (c) The presence of free product, a visible sheen, sludge, or emulsion of a regulated substance, or a regulated substance that is visibly observed in soil, on or in surface water, in groundwater samples, on basement floors, in open drainage ditches, in open excavations or trenches, in subsurface utility conduits or vaults, or in sewer lines at the facility; and,
 - (d) A spill or overfill of a regulated substance to a pervious surface, except as provided in subsection 62-762.441(5), F.A.C.
- (2) Upon discovery of a discharge, the owner or operator shall report the discharge to the county on a DRF within 24 hours or before the close of the county's next business day. If, however, this discovery is thought to be a previously reported discharge, the owner or operator will have 30 days to investigate and submit supporting documentation or a DRF.
- (3) Copies of laboratory analytical results that confirm a discharge shall be submitted to the county within 24 hours of receipt of the results or before the close of the next business day in writing or electronic format.
- (4) A request for a retraction of a submitted DRF shall be submitted to the county or the Department in writing or electronic format if evidence is presented that a discharge did not occur at the facility.
 - (5) A DRF does not need to be submitted:
 - (a) For a discharge that was previously reported to the appropriate county or the Department on a DRF;
 - (b) For petroleum or petroleum product de minimis discharges in accordance with subsection 62-780.560(1), F.A.C., or
 - (c) For non-petroleum de minimis discharges in accordance with Rule 62-780.550, F.A.C.
- (6) Discharge response. When evidence of a discharge from a storage tank system is discovered, the following actions shall be taken:
 - (a) Fire, explosion, and vapor hazards shall be identified and mitigated;
- (b) Actions shall be taken immediately to contain, remove, and abate the discharge under all applicable Department rules (e.g., Chapter 62-780, F.A.C., Contaminated Site Cleanup Criteria). Owners and operators are advised that other federal, state, or local requirements apply to these activities. If the contamination present is subject to the provisions of Chapter 62-780, F.A.C., corrective action, including free product recovery, shall be performed in accordance with Chapter 62-780, F.A.C.;
- (c) Each component of the storage tank system shall be integrity tested within three days of discovery of the discharge if the source or cause of the discharge is unknown;
- (d) The storage tank system component that is discharging shall be isolated from the system within three days of discovery of the discharge. If the component cannot be isolated from the system, within three days of determining that the component is discharging, the storage tank system shall not operate, dispense, nor accept deliveries, or shall be placed out-of-service in accordance with Rule 62-762.801 or 62-762.802, F.A.C., until the component can be repaired or replaced;
- (e) If the storage tank system component that was found to be discharging will be repaired, it shall be repaired in accordance with Rule 62-762.701 or 62-762.702, F.A.C.;
- (f) If the storage tank system component that was found to be discharging will be replaced, it shall meet the storage tank system requirements in accordance with Rules 62-762.501 or 62-762.502, F.A.C.; and,
- (g) If the storage tank system component that was found to be discharging will not be repaired or replaced, the-component shall remain isolated from the storage tank system. In cases where the component cannot be isolated from the storage tank system, the system shall remain out-of-service or shall be closed in accordance with Rule 62-762.801 or 62-762.802, F.A.C.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History–New 1-11-17. Editorial Note: Portions of this rule were copied from Rule 62-762.821, F.A.C.

62-762.451 Notification and Reporting.

Rulemaking Authority 376.303, 376.309 FS. Law Implemented 376.303, 376.309 FS. History-New 6-21-04, Repealed 1-11-17.

62-762.501 Storage Tank System Requirements for Shop Fabricated Storage Tanks.

- (1) General requirements.
- (a) Wellhead Protection. Persons are advised that Chapter 62-521, F.A.C., contains restrictions regarding the location of storage tank systems within 500 feet of a potable water well.

- (b) Secondary containment.
- 1. The materials used for secondary containment shall be:
- a. Impervious to the regulated substances being stored in the storage tank system and able to withstand deterioration from external environmental conditions,
 - b. Non-corrosive or of corrosion-protected materials; and,
 - c. Of sufficient thickness and strength to withstand hydrostatic forces at maximum capacity to prevent a discharge.
- 2. Synthetic liners, unless previously approved by the Department, shall be designed and tested in accordance with *Test Methods, Test Properties and Testing Frequency for High Density Polyethylene (HDPE) Smooth and Textured Geomembranes*, GRI Test Method GM13, Rev. 13, November 2015, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at Geosynthetic Institute, 475 Kedron Avenue, Folsom, Pennsylvania 19033-1208, (610)522-8440, or at http://www.geosynthetic-institute.org/, and be registered with the Department in accordance with subsection 62-762.851(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 *Control of Cracking in Concrete Structures* (Reapproved 2008), ACI 224R-01, (Reapproved 2008), incorporated by reference in paragraph 62-762.201(33)(b), F.A.C., and *Design Considerations for Environmental Engineering Concrete Structures*, ACI 350.4R-04, 2004 Edition, American Concrete Institute (ACI), incorporated by reference in paragraph 62-762.201(33)(b), F.A.C., and be registered with the Department in accordance with subsection 62-762.851(2), F.A.C., or
- b. Lined in accordance with SSPC-TU 2/NACE 6G197, February 1997, incorporated by reference in subparagraph 62-762.201(33)(b)2., F.A.C., unless previously lined in accordance with *Coatings and Linings over Concrete for Chemical Immersion and Containment Service*, NACE Standard SP0892-2007 (formerly RP0892), 2007 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NACE International, 1440 South Creek Drive, Houston, Texas 77084-4906, (800)797-6223, or at http://www.nace.org/, and be registered with the Department in accordance with subsection 62-762.851(2), F.A.C., or
- c. Designed, evaluated, and certified by a professional engineer licensed in the State of Florida that the concrete secondary containment system meets the General Construction Requirements specified in this section.
- 4. Secondary Containment constructed with other materials, including clay liner materials shall be impervious and registered in accordance with Rule 62-762.851(2), F.A.C.
- 5. For cathodically protected tanks and integral piping, secondary containment systems shall not interfere with the operation of the cathodic protection system.
 - 6. For VCI protected tanks, the secondary containment system shall provide containment for the vapor corrosion inhibitors.
 - 7. Secondary containment systems shall be designed and installed to direct any release to a monitoring point or points.
- 8. If factory-made single-walled spill containment systems or single-walled sumps are installed on the system, a containment integrity test shall be performed before the component is placed into service in accordance with *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*, PEI/RP1200-12, 2012 Edition, hereby adopted and incorporated by reference, and available at the Department address located in subsection 62-762.211(1), F.A.C., or the publisher at PEI, Post Office Box 2380, Tulsa, Oklahoma 74101-2380, (918)494-9696, or the publisher's website at www.pei.org/. For field-fabricated components the tests shall be at least for 24 hours in accordance with manufacturer's requirements.
- 9. An interstitial integrity test shall be performed on each double-walled or double-bottomed storage tank with a closed interstice after it is delivered to the facility, and before the storage tank is placed into service. This test shall be performed in accordance with *Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling*, PEI/RP200-13, 2013 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at PEI, Post Office Box 2380, Tulsa, Oklahoma 74101-2380, (918)494-9696, or at www.pei.org/.
- 10. Before integral piping is placed into service, an interstitial integrity test shall be performed on double-walled small diameter integral piping in contact with the soil, or that transports regulated substances over surface waters of the state, in accordance with Recommended Practices for Installation of Underground Liquid Storage Systems, PEI/RP100-11, 2011 Edition, hereby adopted and

incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at PEI, Post Office Box 2380, Tulsa, Oklahoma 74101-2380, (918)494-9696, or at www.pei.org/, and PEI/RP1200-12, 2012 Edition.

- 11. If double-walled spill buckets are installed, an interstitial integrity test shall be performed in accordance with PEI/RP1200-12, 2012 Edition, before the spill bucket is placed into service.
 - (c) Cathodic protection.
- 1. Test stations. Cathodic protection systems shall be designed, constructed, and installed with test stations in accordance with NACE standards contained in paragraph 62-762.211(2)(g), F.A.C., or another 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 subsection 62-762.701(2), F.A.C.
- 3. Any field-installed cathodic protection system shall be designed and installed by or under the direction of a Corrosion Professional.
 - (d) Corrosion Protection with Vapor Corrosion Inhibitors (VCI)
- 1. Testing locations for vapor corrosion inhibitors. Vapor Corrosion Inhibitor technologies registered with the Department in accordance with Rule 62-762.851(2), F.A.C., provide an alternative to cathodic protection for protection of metal surfaces within the secondary containment. Vapor corrosion inhibitors (VCI) effectiveness shall be established by the use of electrical resistance probes located in testing locations as recommended by a Corrosion Professional to monitor corrosion rates.
- 2. Any field-installed VCI protection system shall be designed and installed by or under the direction of a Corrosion Professional and the VCI manufacturer's certified installer. The VCI protection system shall be operated and maintained in accordance with subsection 62-762.701(3), F.A.C.
- (e) Compatibility. The primary and secondary walls of storage tank systems shall be made of, or internally lined with, materials that are compatible with the regulated substance stored in the storage tank systems and with substances or conditions present in the environment. All storage tank systems containing blends of ethanol, biodiesel, or other biofuels and additives shall be compatible with regulated substances stored in the storage tank systems.
- (f) Exterior coatings. Exterior portions of tanks and integral piping shall be coated or otherwise protected from external corrosion. The coating shall be designed and applied to resist corrosion, deterioration, and degradation of the exterior wall.
 - (g) All components of a storage tank system shall be installed in accordance with the manufacturer's instructions.
 - (h) All storage tank systems shall be installed in accordance with the applicable provisions of:
- 1. Flammable and Combustible Liquids Code, Storage Tank Buildings, NFPA 30, 2015 Edition, incorporated by reference in paragraph 62-762.201(36)(a), F.A.C.,
- 2. Motor Fuel Dispensing Facilities and Repair Garages, NFPA 30A, 2015 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NFPA, 1 Batterymarch Park, Quincy, Massachusetts 02169, (617)770-3000, or at www.nfpa.org/,
- 3. *Process Piping*, ASME B31.3, 2014 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at ASME International, 22 Law Drive, Box 2900, Fairfield, New Jersey 07007-2900, (800)843-2763, or the publisher's website at http://www.asme.org/; and,
 - 4. PEI/RP200-13, 2013 Edition.
- (i) Whenever integral piping in contact with the soil is installed or relocated after January 11, 2017, a survey drawing of the underground integral piping, signed and sealed by a professional land surveyor or professional engineer licensed in the State of Florida, shall be completed and maintained as a record in accordance with Rule 62-762.711, F.A.C.
 - (2) Storage tank installation.
- (a) In addition to the requirements of paragraph 62-762.501(1)(h), F.A.C., storage tank systems shall be installed according to the applicable provisions of *Installation Instructions for Shop Fabricated Aboveground Storage Tanks for Flammable, Combustible Liquids*, STI R912, Revised November 2015, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at STI, 944 Donata Court, Lake Zurich, IL 60047, (847)438-8265, or at https://www.steeltank.com/.

- (b) Storage tank construction requirements.
- 1. Storage tanks shall be constructed in accordance with one of the following requirements hereby adopted and incorporated by reference, and available from the Department address given in subsection 62-762.211(1):
- a. Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, UL 142, Revised August 2014, 9th Edition. To obtain this reference from the publisher, see paragraph 62-762.211(2)(m), F.A.C.,
- b. Welded Tanks for Oil Storage, API Std 650, 12th Edition, Includes Errata 1 (2013), Errata 2 (2014), and Addendum 1 (2014), March 2013, incorporated by reference in subsection 62-762.201(67), F.A.C. To obtain this reference from the publisher, see paragraph 62-762.211(2)(b), F.A.C.,
- c. Specification for Fiberglass Reinforced Plastic Tanks, API Spec 12P, 3rd Edition, October 2008. To obtain this reference from the publisher, see paragraph 62-762.211(2)(b), F.A.C.,
- d. Standard for Aboveground Tanks with Integral Secondary Containment, STI F921[®], Revised October 2014. To obtain this reference from the publisher, see paragraph 62-762.211(2)(1), F.A.C.,
- e. Standard for Protected Aboveground Tanks for Flammable and Combustible Liquids, UL 2085, December 1997, 2nd Edition. To obtain this reference from the publisher, see paragraph 62-762.211(2)(m), F.A.C.,
- f. Flameshield® Standard for Fire Tested Tanks, STI F001, October 2014. To obtain this reference from the publisher, see paragraph 62-762.211(2)(1), F.A.C.,
- g. Fireguard: Specification for Fireguard Protected Aboveground Storage Tanks, STI F941, May 2015. To obtain this reference from the publisher, see paragraph 62-762.211(2)(1), F.A.C., or
- h. Generator Base Tanks: Standard for Aboveground Tanks Used as a Generator Base Tank, STI F011, October 2014. To obtain this reference from the publisher, see paragraph 62-762.211(2)(1), F.A.C.
- 2. Storage tanks that meet the above performance requirements, that are constructed of equivalent material, or have an equivalent design shall be registered with the Department in accordance with subsection 62-762.851(2), F.A.C.
- (c) Cathodic and corrosion protection. Steel tanks in contact with soil shall have a cathodic or corrosion protection system meeting the following requirements:
- 1. The cathodic protection system shall be designed, constructed, and installed in accordance with *Cathodic Protection of Aboveground Petroleum Storage Tanks*, API RP 651, 4th Edition, September 2014, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, D.C. 20005, (202)682-8000, or at http://www.api.org/; and *External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms*, NACE Standard RP0193-2001, 2001 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NACE International, 1440 South Creek Drive, Houston, Texas 77084-4906, (800)797-6223, or at http://www.nace.org/,
- 2. A field-installed cathodic protection system shall be designed and installed by or under the direction of a Corrosion Professional,
- 3. The cathodic protection system shall be designed and installed with at least one test station in accordance with subparagraph 62-762.501(1)(c)1., F.A.C., or a method of monitoring to allow for a determination of current operating status; and,
 - 4. The cathodic protection system shall be operated and maintained in accordance with subsection 62-762.701(2), F.A.C.
- 5. Storage tank systems using corrosion protection systems with vapor corrosion inhibitors that are registered in accordance with subsection 62-762.851(2), F.A.C., shall be designed and installed under the direction of a Corrosion Professional, and be installed with at least one electrical resistance probe test location, or a method of monitoring to allow for a determination of the corrosion rate on the underside of the tank floor, or other interstitial or metallic surface. The VCI system shall be designed and installed in accordance with the requirements specified in subsection 62-762.701(3), F.A.C.
 - (d) Secondary containment.
 - 1. All storage tanks, including those that contain used oil, shall have secondary containment.
 - 2. Storage tanks containing high viscosity products are exempt from the requirements for secondary containment.
 - 3. Dike field areas with secondary containment shall:
- a. Conform to the requirements of Chapter 22 of NFPA 30, 2015 Edition, Flammable and Combustible Liquids Code, Storage of Liquids in Tanks Aboveground Storage Tanks,
- b. Contain a minimum of 110 percent of the maximum capacity of the storage tank located within the dike field area, or of the largest single-walled storage tank located within a dike field area containing more than one storage tank. For dike field areas

containing more than one storage tank, capacity calculations shall be made after deducting the volume of the storage tanks, other than the largest storage tank, below the height of the dike,

- c. Be constructed, if not roofed or otherwise protected from the accumulation of rainfall, with either:
- (I) A siphon to remove accumulated liquids or a drainage system that allows the continuous discharge of water but functions to automatically stop the flow of all liquids upon the presence of regulated substances, or
- (II) A gravity drain pipe which has a manually controlled valve, normally closed, or a manually controlled pump. Gravity drain pipes shall be designed and constructed to prevent a discharge in the event of fire; and,
- d. Have all integral piping and other penetrations that pass through the secondary containment of dike field areas sealed around the penetration with an impervious compatible material to prevent the discharge of regulated substances.
 - (e) Overfill protection.
- 1. Owners or operators shall ensure that the volume available in the storage tank is greater than the volume of regulated substances to be transferred to the storage tank before the transfer is made and shall ensure that any transfer is repeatedly monitored to prevent overfilling and spilling, and no storage tank shall be filled beyond 95 percent capacity.
 - 2. All storage tanks shall be equipped with at least one of the following overfill protection devices:
- a. A level gauge or other measuring device that accurately shows the level of regulated substances in the storage tank, and that is visible to the person who is monitoring the filling that shall be registered in accordance with subsection 62-762.851(2), F.A.C., and shall perform an operability test annually at intervals not exceeding 12 months to ensure proper operation,
- b. A high level (at 90 percent tank capacity) warning alarm that shall be registered in accordance with subsection 62-762.851(2), F.A.C., and shall perform an operability test annually at intervals not exceeding 12 months to ensure proper operation,
- c. A high level (at 90 percent tank capacity) liquid flow cutoff controller that shall be registered in accordance with subsection 62-762.851(2), F.A.C., and shall perform an operability test annually at intervals not exceeding 12 months to ensure proper operation, or
 - d. An impervious dike field area designed to contain overfills.
- 3. Storage tanks with capacities of 15,000 gallons or less that do not receive delivery by a mated (joined) tight fill adaptor connection of the delivery hose to the tank riser are exempt from overfill protection requirements provided that the tanks are never filled beyond 80 percent capacity.
 - 4. Used oil tanks that receive less than 25 gallons at one time are not required to have overfill protection.
 - (f) Spill containment systems.
- 1. Storage tanks shall be installed with a spill containment system at each storage tank fill connection, except within dike field areas with secondary containment. The spill containment system shall meet the requirements of paragraph 62-762.501(1)(b), F.A.C., and be registered in accordance with subsection 62-762.851(2), F.A.C.
- 2. Fillbox covers, regardless of the date of installation of the storage tank system, shall be marked or the fill connection tagged and facility signage shall be prominently displayed in accordance with *Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals*, API RP 1637, 3rd Edition, July 2006 (Reaffirmed, May 2012), hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/; or *Identification Markings for Dedicated Aviation Fuel Manufacturing and Distribution Facilities, Airport Storage and Mobile Fuelling Equipment*, EI 1542, 9th Edition, July 2012, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at Energy Institute, 62 New Cavendish Street, London W1G 7AR, United Kingdom, +44 (0) 20 7467 7100, or the publisher's website at https://www.energyinst.org/home, or with an equivalent method approved by the Department in accordance with subsection 62-762.851(1), F.A.C.
- 3. Spill containment systems, including double-walled spill containment systems, shall be installed to allow for release detection in accordance with Rule 62-762.601, F.A.C.
 - (g) Dispensers and dispenser sumps.
- 1. The dispenser used for transferring fuels from storage tanks to vehicles or portable containers shall be installed and maintained in accordance with the provisions of NFPA 30, 2015 Edition; and Chapter 6, *Fuel Dispensing Systems*; Chapter 9, *Operational Requirements*; and Chapter 11, *Marine Fueling* of NFPA 30A *Motor Fuel Dispensing Facilities and Repair Garages*, 2015 Edition.

- 2. Dispensers shall be installed with a dispenser sump, except those within an impervious dike field area with secondary containment, meeting the performance requirements of paragraph 62-762.501(1)(b), F.A.C., and registered in accordance with subsection 62-762.851(2), F.A.C. The dispenser sump shall extend beneath the union of the integral piping and the dispenser, including the shear valve, if applicable. Dispensers mounted directly upon the storage tank or that are otherwise associated with storage tank systems that do not have underground integral piping are exempt from this requirement.
- 3. Dispenser sumps shall be installed to allow for release detection in accordance with Rule 62-762.601, F.A.C. The dispenser sump shall be capable of containing a release for the entire area beneath the dispenser.
 - (h) Piping sumps.
- 1. Piping sumps shall meet the performance requirements of paragraph 62-762.501(1)(b), F.A.C., and be registered in accordance with subsection 62-762.851(2), F.A.C. The piping sumps shall be designed, constructed, and installed to minimize water entering the sump.
 - 2. Piping sumps shall be installed to allow for release detection in accordance with Rule 62-762.601, F.A.C.
- (i) Hydrant sumps. Underground hydrant sumps shall be installed to prevent the discharge of regulated substances during fueling of aircraft, vessels, or at any other time the hydrant system is in use, and be registered in accordance with subsection 62-762.851(2), F.A.C. Any such equipment shall be sealed to and around the hydrant piping with an impervious, compatible material.
- (j) Relocation of storage tanks. Storage tanks that have been removed and reinstalled at a different property shall be reregistered with the Department in accordance with subsection 62-762,401(1), F.A.C. They shall be reinstalled in accordance with manufacturer's specifications and inspected in accordance with STI SP001, Revised 2011, incorporated by reference in subsection 62-762.411(3), F.A.C., and with the requirements in Rule 62-762.501, F.A.C.
 - (3) Small diameter integral piping.
 - (a) Installation.
- 1. All integral piping installed after January 11, 2017, shall be installed in accordance with the manufacturer's instructions, if applicable, and according to the applicable provisions of PEI/RP200-13, 2013 Edition; Chapter 27 of NFPA 30, 2015 Edition, Flammable and Combustible Liquids Code, Piping Systems; NFPA 30A, 2015 edition; and Pipeline Transportation Systems for Liquids and Slurries, ASME B31.4, 2012 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at ASME International, 22 Law Drive, Box 2900, Fairfield, New Jersey 07007-2900, (800)843-2763, or the publisher's website at http://www.asme.org/.
- 2. An interstitial integrity test shall be performed on double-walled integral piping that is in contact with the soil, or that transports regulated substances over surface waters of the state in accordance with PEI/RP100-11, 2011 Edition and PEI/RP1200-12, 2012 Edition, before the integral piping is placed into service.
- 3. All new integral piping that is not in contact with the soil, shall meet the construction requirements in paragraphs 62-762.501(3)(a) through (c), F.A.C., and shall be UV rated if exposed to sunlight if made of non-metallic materials.
- 4. New double-walled integral piping that is in contact with the soil shall be installed with a slope to a low point monitoring system. Double-walled integral piping utilizing hydrostatic, pressure or vacuum monitoring are not subject to this requirement.
- 5. All new pressurized small diameter integral piping that is in contact with the soil must be installed with line leak detectors meeting the requirements of paragraph 62-762.601(4)(b), F.A.C. The line leak detectors must be tested annually at intervals not exceeding 12 months in accordance with paragraph 62-762.601(1)(b), F.A.C., and be installed in accordance with Section 7 of PEI/RP200-13, Recommended Practices for Installation of Aboveground Storage Systems for Motor Vehicle Fueling, Pumps and Valves, 2013 Edition.
- 6. All pressurized small diameter integral piping installed prior to January 11, 2017, that is in contact with the soil must be installed with line leak detectors meeting the requirements of paragraph 62-762.601(4)(b), F.A.C., within one year of January 11, 2017. The line leak detectors must be tested annually at intervals not exceeding 12 months in accordance with paragraph 62-762.601(1)(b), F.A.C., and be installed in accordance with Section 7 of PEI/RP200-13, 2013 Edition. Line leak detectors must be located downstream from the anti-siphon or solenoid valve. Line leak detectors are not required for piping that is not in contact with the soil.
 - (b) Secondary containment.
- 1. All small diameter integral piping, including remote fill piping, that is in contact with the soil or that transports regulated substances over surface waters of the state, including those that contain used oil, shall have secondary containment.
 - 2. Small diameter integral piping containing high viscosity products are exempt from the requirements for secondary

containment.

- 3. Single-walled integral piping that is in contact with the soil, and is not exempt pursuant to subparagraph 62-762.501(3)(b)2., F.A.C., shall be immediately and permanently closed in accordance with subsection 62-762.801(2), F.A.C.
 - (c) Construction
- 1. Fiberglass reinforced plastic piping, semi-rigid non-metallic, or other non-rigid piping installed in contact with the soil shall be installed in accordance with *Non-metallic Underground Piping for Flammable Liquids*, UL 971, March 2006, 2nd Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at UL, 333 Pfingsten Road, Northbrook, Illinois 60062-2096, (847)272-8800, or at www.ul.com/, or certified by a Nationally Recognized Testing Laboratory that these requirements are met, and registered in accordance with subsection 62-762.851(2), F.A.C.
- 2. Rigid metallic integral piping shall be constructed in accordance with ASME B31.3, 2014 Edition, or PEI/RP200-13, 2013 Edition. In addition, steel integral piping in contact with the soil shall be cathodically protected in accordance with the following documents: Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems, API RP 1632, 3rd Edition, May 1996, (Reaffirmed, June 2002), hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202) 682-8000, or at http://www.api.org/; Control of External Corrosion on Underground or Submerged Metallic Piping Systems, NACE Standard SP0169-2013 (formerly RP0169), 2013 Edition, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at NACE International, 1440 South Creek Drive, Houston, Texas 77084-4906, (800)797-6223, or at http://www.nace.org/; and Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems, STI R892, Revised January 2006, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at STI, 944 Donata Court, Lake Zurich, IL 60047, (847)438-8265, or at https://www.steeltank.com/.
- 3. Metallic double-walled integral piping constructed of nonferrous materials such as copper shall be constructed in accordance with the requirements in Chapter 27 of NFPA 30, 2015 Edition.
- 4. Integral double-walled piping constructed of other materials, design, or corrosion protection shall be registered with the Department in accordance with subsection 62-762.851(2), F.A.C.
- 5. Small diameter integral piping using corrosion protection systems with vapor corrosion inhibitors that are registered in accordance with subsection 62-762.851(2), F.A.C., shall be designed and installed under the direction of a Corrosion Professional, and shall be installed with at least one electrical resistance probe or a method of monitoring to allow for a determination of the corrosion rate within the piping interstice. The VCI system shall be designed and installed in accordance with the requirements specified in subsection 62-762.701(3), F.A.C.
 - (d) Valves.
- 1. Shear valves. Pressurized small diameter integral piping systems connected to dispensers shall be installed with shear valves or emergency shutoff valves in accordance with Section 6.3 of NFPA 30A, *Motor Fuel Dispensing Facilities and Repair Garages, Requirements for Dispensing Devices*, 2015 Edition. These valves shall be designed to close automatically if a dispenser is displaced from its normal position. The valves shall be rigidly anchored independently of the dispenser. The valves shall be tested in accordance with PEI/RP1200-12, 2012 Edition, 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. Isolation block valves. Any storage tank system, regardless of the date of installation of the storage tank system, located at an elevation that produces a gravity head on small diameter integral piping positioned below the product level in the tank must be installed and maintained with an isolation block valve in accordance with Chapter 22.13 of NFPA 30, 2015 Edition, *Flammable and Combustible Liquids Code*, *Tank Openings Other Than Vents*.
- 3. Anti-siphon valves. For storage tank systems that produce a gravity head on small diameter integral piping positioned below the product level in the tank, anti-siphon valves shall be installed and maintained in accordance with Section 7 of PEI/RP200-13, 2013 Edition, and Section 11.2 of NFPA 30A, *Marine Fueling, Storage*, 2015 Edition. For such storage tank systems installed prior to January 11, 2017, anti-siphon valves shall be installed within one year of January 11, 2017. Integral piping located within an impervious dike field area does not require anti-siphon valves.
- (4) Bulk product piping associated with shop fabricated storage tanks shall meet the requirements of subsection 62-762.502(4), F.A.C.

62 762.502 Storage Tank System Requirements for Field Erected Storage Tanks.

- (1) General requirements.
- (a) Wellhead Protection. Persons are advised that Chapter 62-521, F.A.C., contains restrictions regarding the location of storage tank systems within 500 feet of a potable water well.
 - (b) Secondary containment.
 - 1. The materials used for secondary containment shall be:
 - a. Impervious to the regulated substances and able to withstand deterioration from external environmental conditions;
 - b. Non-corrosive or of corrosion-protected materials; and,
 - c. Of sufficient thickness and strength to withstand hydrostatic forces at maximum capacity to prevent a discharge.
- 2. Synthetic liners, unless previously approved by the Department, shall be designed and tested in accordance with GRI Test Method GM13, Rev. 13, November 2015, incorporated by reference in subparagraph 62-762.501(1)(b)2., F.A.C., and be registered with the Department in accordance with subsection 62-762.851(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 224R-01, (Reapproved 2008), and ACI 350.4R-04, 2004 Edition, both incorporated by reference in paragraph 62-762.201(33)(b), F.A.C., and be registered with the Department in accordance with subsection 62-762.851(2), F.A.C., or
- b. Lined in accordance with SSPC-TU 2/NACE 6G197, February 1997, incorporated by reference in subparagraph 62-762.201(33)(b)2., F.A.C., unless previously lined in accordance with NACE Standard SP0892-2007, (formerly RP0892), 2007 Edition, incorporated by reference in sub-subparagraph 62-762.501(1)(b)3.b., F.A.C., and be registered with the Department in accordance with subsection 62-762.851(2), F.A.C., or
- c. Designed, evaluated, and certified by a professional engineer licensed in the State of Florida that the concrete secondary containment system meets the general construction requirements specified in this section.
- 4. Secondary Containment constructed with other materials, including clay liner materials, shall be impervious and registered in accordance with subsection 62-762.851(2), F.A.C.
- 5. For cathodically protected tanks and integral piping, secondary containment systems shall not interfere with the operation of the cathodic protection system.
 - 6. For VCI protected tanks, the secondary containment system shall provide containment for the vapor corrosion inhibitors.
 - 7. Secondary containment systems shall be designed and installed to direct any release to a monitoring point or points.
- 8. If factory-made containment systems or single-walled sumps are installed on the system, a containment integrity test shall be performed in accordance with PEI/RP1200-12, 2012 Edition, incorporated by reference in subparagraph 62-762.501(1)(b)8., F.A.C., before the component is placed into service. For field-fabricated components the tests shall be at least for 24 hours in accordance with manufacturer's requirements.
- 9. An interstitial integrity test shall be performed on each double-walled or double-bottomed storage tank with a closed interstice after it is constructed at the facility, and before the storage tank is placed into service. This test shall be performed in accordance with Annex I.6, Testing and Inspection, located in API Std 650, incorporated by reference in subsection 62-762.201(67), F.A.C.
- 10. An interstitial integrity test shall be performed on double-walled small diameter integral piping in contact with the soil, or that transports regulated substances over surface waters of the state, in accordance with PEI/RP100-11, 2011 Edition, incorporated by reference in subparagraph 62-762.501(1)(b)10., F.A.C., and PEI/RP1200-12, 2012 Edition, before the small diameter integral piping is placed into service.
 - (c) Cathodic protection.
- 1. Test stations. Cathodic protection systems shall be designed, constructed, and installed with test stations in accordance with NACE standards contained in paragraph 62-762.211(2)(g), F.A.C., or another 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 subsection 62-762.702(2), F.A.C.
- 3. Any field-installed cathodic protection system shall be designed and installed by or under the direction of a Corrosion Professional.
 - (d) Corrosion Protection with Vapor Corrosion Inhibitors (VCI).
- 1. Testing locations for vapor corrosion inhibitors. Vapor Corrosion Inhibitor technologies, registered with the Department in accordance with subsection 62-762.851(2), F.A.C., provide an alternative to cathodic protection for protection of metal surfaces within the secondary containment. VCI effectiveness shall be established by the use of electrical resistance probes located in testing locations as recommended by a Corrosion Professional to monitor corrosion rates.
- 2. Any field-installed VCI protection system shall be designed and installed by, or under the direction of, a Corrosion Professional and the VCI manufacturer's certified installer. The VCI protection system shall be operated and maintained in accordance with subsection 62-762.702(3), F.A.C.
- (e) Compatibility. The primary and secondary walls of storage tank systems shall be made of, or internally lined with, materials that are compatible with the regulated substance stored in the storage tank systems and with substances or conditions present in the environment. All storage tank systems containing blends of ethanol, biodiesel, or other biofuels and additives shall be compatible with regulated substances stored in the storage tank systems.
- (f) Exterior coatings. Exterior portions of tanks and integral piping shall be coated or otherwise protected from external corrosion. The coating shall be designed and applied to resist corrosion, deterioration, and degradation of the exterior wall.
 - (g) All components of a storage tank system shall be installed in accordance with the manufacturer's instructions.
- (h) All storage tank systems shall be installed in accordance with the applicable provisions of API Std 650, March 2013, incorporated by reference in subsection 62-762.201(67), F.A.C.; NFPA 30, 2015 Edition, incorporated by reference in paragraph 62-762.201(36)(a), F.A.C.; NFPA 30A, 2015 Edition, incorporated by reference in subparagraph 62-762.501(1)(h)2., F.A.C.; ASME B31.3, 2014 Edition, incorporated by reference in subparagraph 62-762.501(1)(h)3., F.A.C.; and PEI/RP200-13, 2013 Edition, incorporated by reference in subparagraph 62-762.501(1)(b)9., F.A.C.
- (i) Whenever integral piping in contact with the soil is installed or relocated after January 11, 2017, a survey drawing of the underground integral piping, signed and sealed by a professional land surveyor or professional engineer licensed in the State of Florida, shall be completed and maintained as a record in accordance with Rule 62-762.711, F.A.C.
 - (2) Storage tank installation.
 - (a) All storage tank systems shall be installed in accordance the applicable provisions of Chapter 22 of NFPA 30, 2015 Edition.
 - (b) Storage tank construction requirements.
 - 1. Storage tanks shall be constructed in accordance with one of the following:
- a. Design and Construction of Large, Welded, Low-Pressure Storage Tanks, API Std 620, 12th Edition, October 2013, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/, or
 - b. API Std 650, incorporated by reference in subsection 62-762.201(67), F.A.C.
- 2. Storage tanks shall be inspected and tested at a frequency established in accordance with API Std 653, November 2014, incorporated by reference in subsection 62-762.411(3), F.A.C., and maintained for the life of the tank.
- (c) Cathodic and corrosion protection. Steel tanks in contact with soil shall have a cathodic or corrosion protection system meeting the following requirements:
- 1. The cathodic protection system shall be designed, constructed, and installed in accordance with API RP 651, 4th Edition, September 2014, incorporated by reference in paragraph 62-762.501(2)(c), F.A.C., or NACE Standard RP0193-2001, 2001 Edition, incorporated by reference in subparagraph 62-762.501(2)(c)1., F.A.C. Storage tanks that have been upgraded with secondary containment consisting of a new steel bottom that is not in contact with the soil are not required to have cathodic protection on the new steel bottom,
- 2. A field-installed cathodic protection system shall be designed and installed by or under the direction of a Corrosion Professional,
- 3. The cathodic protection system shall be designed and installed with at least one test station in accordance with paragraph 62-762.502(1)(c), F.A.C., or a method of monitoring to allow for a determination of current operating status; and,

- 4. The cathodic protection system shall be operated and maintained in accordance with subsection 62-762.702(2), F.A.C.
- 5. Storage tank systems using corrosion protection systems with vapor corrosion inhibitors that are registered in accordance with subsection 62-762.851(2), F.A.C., shall be designed and installed in accordance with the requirements specified in subsection 62-762.702(3), F.A.C., and under the direction of a Corrosion Professional.
 - (d) Secondary containment.
 - 1. All storage tanks, including those that contain used oil, shall have secondary containment.
 - 2. Storage tanks containing high viscosity products are exempt from the requirements for secondary containment.
 - 3. Dike field areas with secondary containment shall:
 - a. Conform to the requirements of Chapter 22 of NFPA 30, 2015 Edition,
- b. Contain a minimum of 110 percent of the maximum capacity of the storage tank located within the dike field area, or of the largest single-walled storage tank located within a dike field area including more than one storage tank. For dike field areas containing more than one storage tank, capacity calculations shall be made after deducting the volume of the storage tanks, other than the largest storage tank, below the height of the dike,
 - c. Be constructed, if not roofed or otherwise protected from the accumulation of rainfall, with either:
- (I) A siphon to remove accumulated liquids or a drainage system that allows the continuous discharge of water but functions to automatically stop the flow of all liquids upon the presence of regulated substances, or
- (II) A gravity drain pipe which has a manually controlled valve, normally closed, or a manually controlled pump. Gravity drain pipes shall be designed and constructed to prevent a discharge in the event of fire; and,
- d. Have all integral piping and other penetrations that pass through the secondary containment of dike field areas sealed around the penetration with an impervious compatible material to prevent the release of regulated substances.
- 4. Storage tanks where the entire bottom of the tank is in contact with concrete, and the concrete is not sealed in accordance with paragraph 62-762.502(1)(b), F.A.C., do not have to seal the concrete beneath the tank until such time as the tank bottom is replaced. Concrete secondary containment systems designed in accordance with subparagraph 62-762.502(1)(b)3., F.A.C., do not have to be sealed.
- 5. Instead of installing secondary containment in the entire dike field area in accordance with this subsection, an alternative dike field secondary containment system registered in accordance with subsection 62-762.851(2), F.A.C., may be used. Alternative dike field secondary containment systems are not allowed in public wellhead protection areas. The alternative dike field secondary containment system, regardless of the date of installation of the storage tank system, must provide:
 - a. Continuous tank shell monitoring with approved probes, cables, or electronic sensors,
 - b. Immediate electronic notification to the owner or operator of overfills and leaks from the tank shell,
 - c. Stormwater management,
- d. A high and a high-high level overfill alarm system with an annual test of operability, in accordance with Overfill Protection for Storage Tanks in Petroleum Facilities, API RP 2350, 4th Edition, May 2012, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/,
- e. An impervious overfill retention system that will contain the volume of product that would be transferred at the maximum flow rate for a period of five minutes by the pump(s) used for filling the tank,
- f. An automatic system for shutting off the pump(s) used for filling the tank by an electronic signal from the continuous tank shell monitoring system, or an automatic system for the closing of any valve whose actuation time will stop the product transfer without inducing hydraulic hammer into the transfer system. The system must be designed to operate in conjunction with the impervious overfill retention system and be capable of preventing any discharge of product being transferred during and after the time needed to shut off the pump or close the valve,
- g. Equipment that is designed to be secondary containment in accordance with paragraph 62-762.502(1)(b), F.A.C., installed around or beneath pumps and valves within the dike field or secondary containment area; and,
- h. For new tanks, a release prevention barrier underneath the tank in accordance with API Std 650, Annex I, incorporated by reference in subsection 62-762.201(67), F.A.C., or an equivalent system registered as a release prevention barrier or secondary containment in accordance with subsection 62-762.851(2), F.A.C.
- 6. Instead of installing secondary containment in the entire dike field area in accordance with this subsection, a double-walled storage tank may be used. The storage tank must be constructed in accordance with API Std 650.

- 7. Release prevention barriers for dike field containment systems shall be impervious and be designed and constructed in accordance with API Std 650, or be registered as a release prevention barrier or secondary containment in accordance with subsection 62-762.851(2), F.A.C.
 - (e) Overfill protection.
- 1. No transfer of regulated substances shall be made unless the volume available in the tank is greater than the volume of regulated substances to be transferred. The transfer shall be repeatedly monitored to prevent overfilling.
 - 2. Overfill protection shall be performed, as applicable, in accordance with API RP 2350, 4th Edition, May 2012.
- 3. All storage tanks, not subject to API 2350, 4th Edition, May 2012, shall not be filled beyond 90 percent capacity and shall be equipped with at least one of the following overfill protection devices:
- a. A gauge or other measuring device that accurately shows the level of regulated substances in the storage tank, and that is visible to the person who is monitoring the filling that shall be registered in accordance with subsection 62-762.851(2), F.A.C., and shall perform an operability test annually at intervals not exceeding 12 months to ensure proper operation,
- b. A high level warning alarm that shall be registered in accordance with subsection 62-762.851(2), F.A.C., and shall perform an operability test annually at intervals not exceeding 12 months to ensure proper operation,
- c. A high level liquid flow cutoff controller that shall be registered in accordance with subsection 62-762.851(2), F.A.C., and shall perform an operability test annually at intervals not exceeding 12 months to ensure proper operation, or
 - d. An impervious dike field area designed to contain overfills.
- (f) Spill Containment. Storage tanks that are loaded by trucks shall be installed with a spill containment system at each tank fill connection within six months of January 11, 2017, except for tank fill connections located within dike field areas with secondary containment or within tank truck containment areas. The spill containment system shall meet the requirements of paragraph 62-762.502(1)(b), F.A.C.
 - (g) Piping sumps.
- 1. Piping sumps shall meet the performance requirements of paragraph 62-762.502(1)(b), F.A.C., and be registered in accordance with subsection 62-762.851(2), F.A.C. The sumps shall be designed, constructed, and installed to prevent water entering the sump.
- 2. Piping sumps shall be installed to allow for interstitial monitoring of the integral piping and monitoring of the piping sump, as applicable, in accordance with Rule 62-762.601, F.A.C.
- (h) Hydrant sumps. Underground hydrant sumps shall be installed to prevent the discharge of regulated substances during fueling of aircraft, vessels, or at any other time the hydrant system is in use, and shall be registered in accordance with subsection 62-762.851(2), F.A.C. Any such equipment shall be sealed to and around the hydrant piping with an impervious, compatible material. Hydrant sumps shall be containment integrity tested in accordance with subparagraph 62-762.502(1)(b)8., F.A.C.
- (i) Relocation of storage tanks. Storage tanks that have been removed and that are to be reinstalled at a different location shall be re-registered with the Department in accordance with subsection 62-762.401(1), F.A.C., and reinstalled in accordance with API Std 653, November 2014, incorporated by reference in subsection 62-762.411(3), F.A.C.
- (3) Small diameter integral piping associated with field erected storage tanks shall meet the requirements of subsection 62-762.501(3), F.A.C.
 - (4) Bulk product piping.
 - (a) Installation.
- 1. Bulk product piping shall be constructed and installed in accordance with the applicable provisions of Chapter 27 of NFPA 30, 2015 Edition; and either ASME B31.3, 2014 Edition; or B31.4, 2012 Edition, incorporated by reference in subparagraph 62-762.501(3)(a)1., F.A.C.; or Welding of Pipelines and Related Facilities, API Std 1104, 21st Edition, includes Errata 1 (2013), Errata 2 (2014), Errata 3 (2014), and Addendum 1 (2014), September 2013, hereby adopted and incorporated by reference, and available at the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/.
- 2. All new bulk product piping that is not in contact with the soil shall meet the construction requirements in paragraphs 62-762.502(4)(a) and (c), F.A.C.
- 3. An integrity test shall be performed for underground bulk product piping for high viscosity products in accordance with Chapter 27 of NFPA 30, 2015 Edition, before the piping system is placed into initial use. An interstitial integrity test shall be performed for underground bulk product piping with secondary containment in accordance with subsection 62-762.702(4), F.A.C.,

or Chapter 27 of NFPA 30, 2015 Edition, before the piping is placed into initial use.

- (b) Secondary containment.
- 1. All bulk product piping, including such piping that contains used oil, that is in contact with the soil or that transports regulated substances over surface waters of the state shall have secondary containment.
- 2. Single-walled bulk product piping that was installed before June 30, 1992, and that had an initial structural evaluation performed in accordance with API 570, November 2009, incorporated by reference in subsection 62-762.411(3), F.A.C., before January 1, 2000, is exempt from this requirement if the evaluation indicated that the bulk product piping had remaining useful life. The piping shall be repaired or upgraded with secondary containment or closed when a periodic API 570, November 2009, inspection indicates that repair, upgrading or closure is necessary.
 - 3. Bulk product piping containing high viscosity products are exempt from the requirements for secondary containment.
- 4. Single-walled bulk product piping that is in contact with the soil and is not exempt pursuant to subparagraphs 62-762.502(4)(b)2. and 3., F.A.C., shall be immediately and permanently closed in accordance with subsection 62-762.802(3), F.A.C.
- 5. Bulk product piping in contact with the soil containing high viscosity products may be converted to non-high viscosity product service without having to install secondary containment if an API 570, November 2009, integrity assessment, incorporated by reference in subsection 62-762.411(3), F.A.C., is performed and confirms that the piping has remaining useful life. The piping shall be repaired or upgraded with secondary containment or closed when a periodic API 570, November 2009, inspection indicates that repair, upgrading or closure is necessary.
 - (c) Construction.
- 1. New steel bulk product piping shall be constructed in accordance with ASME B31.3, 2014 Edition; or ASME B31.4, 2012 Edition; or API STD 1104, 21st Edition, includes Errata 1 (2013), Errata 2 (2014), Errata 3 (2014), and Addendum 1 (2014), September 2013. Bulk product steel integral piping in contact with the soil shall be cathodically protected in accordance with API RP 1632, May 1996, (Reaffirmed June 2002), incorporated by reference in subparagraph 62-762.501(3)(c)2., F.A.C.; NACE Standard SP0169-2013, 2013 Edition, incorporated by reference in subparagraph 62-762.501(3)(c)2., F.A.C.; or STI R892, Revised January 2006, incorporated by reference in subparagraph 62-762.501(3)(c)2., F.A.C. Corrosion Protection can also be provided using vapor corrosion inhibitors registered in accordance with subsection 62-762.851(2), F.A.C. Bulk product piping using corrosion protection systems with vapor corrosion inhibitors that are registered in accordance with subsection 62-762.851(2), F.A.C., shall be designed and installed under the direction of a Corrosion Professional.
- 2. Bulk product piping constructed of other materials, design, or corrosion protection shall be registered with the Department in accordance with subsection 62-762.851(2), F.A.C.
- 3. Bulk product piping using corrosion protection systems with vapor corrosion inhibitors that are registered in accordance with subsection 62-762.851(2), F.A.C., shall be designed and installed under the direction of a Corrosion Professional and shall be installed with at least one electrical resistance probe or a method of monitoring to allow for a determination of the corrosion rate within the piping interstice. The VCI system shall be designed and installed in accordance with the requirements specified in subsection 62-762.702(3), F.A.C.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 1-11-17.

62-762.511 Performance Standards for Category-A and Category-B Storage Tank Systems.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Repealed 1-11-17.

62-762.601 Release Detection Requirements for Shop Fabricated Storage Tanks.

- (1) General requirements.
- (a) Storage tank systems shall have a method or combination of methods of release detection that can detect a new release from any portion of the storage tank system.
- (b) Any storage tank system without a method, or combination of methods, of release detection in accordance with this section, shall immediately provide a method of release detection, or immediately empty the storage tank system and place the affected system out-of-service in accordance with subsection 62-762.801(2), F.A.C.
- (c) Any component of a storage tank system with an interstice shall have a method of interstitial monitoring which shall be conducted in accordance with this section. Interstitial monitoring can be performed with vacuum, pressure, hydrostatic (liquid-level sensing), sensors or probes, or visual release detection methods.

- (d) Except as otherwise specified in this Rule, the release detection method or combination of methods used at a facility shall be performed at least once every calendar month, but not exceeding 35 days, to determine if a release from the storage tank system has occurred.
- (e) Visual inspections. At least once a month, but not exceeding 35 days, every component of a storage tank system that contains, transfers, or stores, or is designed to contain, transfer, or store regulated substances that can be inspected visually shall be visually inspected and documented as to its condition pursuant to Rule 62-762.711, F.A.C. Any visual inspection of a storage tank system that reveals uncontrolled pitting corrosion, structural damage, leakage, or other similar problems is considered a positive response. The positive response shall be recorded as part of the release detection records, and reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C. Repairs shall be made in accordance with Rule 62-762.701, F.A.C. A monthly visual inspection is not required for any system component using an electronic release detection method; however, piping and dispenser sumps that use an electronic release detection method must also be visually inspected every six months and records kept of the visual inspection.
 - (f) Electronic and mechanical release detection devices shall be:
- 1. Installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, and shall be designed and installed to provide service checks for operability to ensure that the device is functioning in accordance with subsection 62-762.701(4), F.A.C.; and,
- 2. Registered in accordance with subsection 62-762.851(2), F.A.C., except that controllers or annunciators that are used to display leak detection test results are not required to be registered.
- (g) Electronic release detection devices shall be inspected for proper operation at least once every calendar month, but not exceeding 35 days. A record or summary of the alarm history, sensor status, and testing results related to suspected releases shall be printed from any electronic release detection device. If the release detection system is not capable of printing records, a manual log shall be maintained of the alarm history, sensor status, and testing results.
- (h) Release detection shall be constructed and installed so that groundwater, rainfall, or soil moisture will not render the release detection method used inoperable.
- (i) Storage tank systems containing high viscosity product are exempt from all release detection requirements except for visual inspections.
 - (2) Storage tanks with secondary containment.
 - (a) One or more of the following release detection methods shall be used:
- 1. Liquid level monitoring systems with electronic hydrostatic sensors. These methods shall be able to detect incidents by determining changes in liquid levels within the interstice and monitoring reservoir, and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if liquid levels cannot be maintained. Any alarm that indicates that liquid levels are not being maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 2. Vacuum monitoring. This method shall be able to detect incidents by determining changes in vacuum levels within the interstice by continuous monitoring of vacuum levels and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if vacuum levels can not be maintained. Any alarm that indicates that vacuum levels are not being maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 3. Pressure monitoring. This method shall be able to detect incidents by using an inert gas and determining changes in pressure levels within the interstice by continuous monitoring of pressure levels and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if pressure levels can not be maintained. Any alarm that indicates that pressure levels are not being maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 4. Electronic sensors in a normally dry interstice. This method shall be able to detect the presence of liquid in the interstice or monitoring low point and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if liquid is detected. Any alarm that indicates the presence of liquid is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 5. Visually inspected liquid level monitoring systems. This method shall be able to detect incidents by determining changes in liquid levels within the interstice and monitoring resevoir. Any visual observation that indicates that liquid levels are not being

maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.

- 6. Visually inspected vacuum or pressure monitoring with gauges. This method shall be able to detect incidents by determining changes in vacuum or pressure levels within the interstice.
- a. Pressure readings shall be able to detect a 50 percent change from one month to the next, or any change in pressure exceeding 50 percent of the initial level or of a pressure level that is reestablished at the time of an incident investigation or annual testing of the gauge, and for vacuum systems, any complete loss of vacuum or positive pressure reading. Vacuum or pressure refreshment must be performed in accordance with manufacturer's specifications and the system's equipment registration in subsection 62-762.851(2), F.A.C. Any change indicated above is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- b. Liquid-filled gauges shall be calibrated using the National Institute of Standards and Technology (NIST) traceable standards, hereby adopted and incorporated by reference, prior to initial operation. Information on NIST can be obtained from 100 Bureau Drive, Stop 1070, Gaithersburg, Maryland 20899-1070, (301)975-6478, or at http://www.nist.gov/index.html. The gauges shall be operational at all times.
- 7. Visual monitoring of normally dry interstices. This method shall be able to detect the presence of liquid at a low point of the interstice. Any presence of water, other than condensate, or regulated substances in the interstice is considered a positive response. The positive response shall be recorded as part of the release detection records and reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 8. Visual monitoring of dike fields. This method shall be able to detect the presence of liquid at a low point in the dike field. The accumulation of water or condensation in the low point of the dike field shall not interfere with the ability to detect regulated substances. Any release of regulated substance in the dike field is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
 - (3) Storage tanks without secondary containment.
- (a) Required release detection methods. Storage tanks that are exempt from secondary containment shall have monthly visual inspections performed in accordance with paragraph 62-762.601(1)(e), F.A.C.
- (b) Performance Requirements. Visual inspections of storage tanks shall include an inspection of the exterior of each tank, the integral piping, and any other storage tank system components.
 - (4) Small diameter integral piping with secondary containment.
 - (a) One or more of the applicable release detection methods in subsection 62-762.601(2), F.A.C., shall be used.
- (b) In addition, pressurized small diameter integral piping in contact with the soil shall be equipped with a release detection system that can detect a leak within one hour. One of the following methods shall be used:
- 1. Mechanical line leak detectors. Mechanical line leak detectors shall be capable of detecting a discharge of 3.0 gallons per hour (gph) with a probability of detection of 0.95, and a probability of false alarm of 0.05 at an equivalent line pressure of 10 pounds per square inch (psi) and restrict flow within one hour. Any instance where the mechanical line leak detector is restricting flow is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 2. Electronic line leak detectors. Electronic line leak detectors shall 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 an equivalent line pressure of 10 psi and shut off power to the pump. Any instance where the electronic line leak detector has shut off power to the pump is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 3. Electronic interstitial monitoring devices. Storage tank systems without line leak detectors, shall have electronic interstitial monitoring devices that are capable of detecting a release of 10 gallons within one hour and shutting off the pump. Any instance where the monitoring device has shut off the pump is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- (5) Bulk product piping and hydrant piping with secondary containment associated with shop fabricated storage tank systems shall meet the requirements of subsection 62-762.602(5), F.A.C.
- (6) Bulk product and hydrant piping without secondary containment associated with shop fabricated storage tank systems shall meet the requirements of subsection 62-762.602(6), F.A.C.
- (7) Annual operability testing of release detection systems. All release detection devices shall be tested annually at intervals not exceeding 12 months to ensure proper operation. The test must either simulate an actual alarm condition or shall be conducted

according to manufacturer's specifications, and shall include, at a minimum, a determination of whether the device operates as designed. Remote testing of the system can be performed by the manufacturer if the remote test is included in the third-party certification by a Nationally Recognized Testing Laboratory.

(8) Records shall be kept for three years generated on or after January 11, 2017. Records generated before January 11, 2017, are required to be kept for two years, in accordance with Rule 62-762.711, F.A.C.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Amended 1-11-17.

62-762.602 Release Detection Requirements for Field Erected Storage Tank Systems.

- (1) General requirements.
- (a) Storage tank systems shall have a method or combination of methods of release detection that can detect a new release from any portion of the storage tank system.
- (b) Any storage tank system without a method, or combination of methods, of release detection in accordance with this section, shall immediately provide a method of release detection, or immediately empty the storage tank system and place the affected system out-of-service, or close the system in accordance with subsection 62-762.802(3), F.A.C.
- (c) Any component of a storage tank system with an interstice shall have a method of interstitial monitoring which shall be conducted in accordance with this section. Interstitial monitoring can be performed with vacuum, pressure, hydrostatic (liquid-level sensing), sensors or probes, or visual release detection methods.
- (d) Except as otherwise specified in this Rule, the release detection method or combination of methods used at a facility shall be performed at least once every calendar month, but not exceeding 35 days, to determine if a release from the storage tank system has occurred.
- (e) Visual inspections. At least once a month, but not exceeding 35 days, every component of a storage tank system that contains, transfers, or stores, or is designed to contain, transfer, or store regulated substances can be inspected visually shall be visually inspected and documented as to its condition pursuant to Rule 62-762.711, F.A.C. Any visual inspection of a storage tank system that reveals uncontrolled pitting corrosion, structural damage, leakage, or other similar problems is considered a positive response. The positive response shall be recorded as part of the release detection records and reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C. Repairs shall be made in accordance with Rule 62-762.702, F.A.C. A visual inspection is not required for any system component using an electronic release detection method.
 - (f) Electronic and mechanical release detection devices shall be:
- 1. Installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, and shall be designed and installed to provide service checks for operability to ensure that the device is functioning in accordance with subsection 62-762.702(4), F.A.C.; and,
- 2. Registered in accordance with subsection 62-762.851(2), F.A.C., except that controllers or annunciators that are used to display leak detection test results are not required to be registered.
- (g) Electronic release detection devices shall be inspected for proper operation at least once every calendar month, but not exceeding 35 days. A record or summary of the alarm history, sensor status, and testing results related to suspected releases shall be printed from any electronic release detection device. If the release detection system is not capable of printing records, a manual log shall be maintained of the alarm history, sensor status, and testing results.
- (h) Release detection shall be constructed and installed so that groundwater, rainfall, or soil moisture will not render the release detection method used inoperable.
- (i) Storage tank systems containing high viscosity product are exempt from all release detection requirements except for visual inspections.
 - (2) Storage tanks with secondary containment.
 - (a) One or more of the following release detection methods shall be used:
- 1. Liquid level monitoring systems with electronic hydrostatic sensors. These methods shall be able to detect incidents by determining changes in liquid levels within the interstice and monitoring reservoir and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if liquid levels cannot be maintained. Any alarm that indicates that liquid levels are not being maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
 - 2. Vacuum monitoring. This method shall be able to detect incidents by determining changes in vacuum levels within the

interstice by continuous monitoring of vacuum levels and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if vacuum levels can not be maintained. Any alarm that indicates that vacuum levels are not being maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.

- 3. Pressure monitoring. This method shall be able to detect incidents by using an inert gas and determining changes in pressure levels within the interstice by continuous monitoring of pressure levels and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if pressure levels can not be maintained. Any alarm that indicates that pressure levels are not being maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 4. Electronic sensors in a normally dry interstice. This method shall be able to detect the presence of liquid in the interstice or monitoring low point and to provide immediate electronic notification with an audible or visual alarm to the owner or operator if liquid is detected. Any alarm that indicates the presence of liquid is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 5. Visually inspected liquid level monitoring systems. This method shall be able to detect incidents by determining changes in liquid levels within the interstice and monitoring resevoir. Any visual observation that indicates that liquid levels are not being maintained is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 6. Visually inspected vacuum or pressure monitoring with gauges. This method shall be able to detect incidents by determining changes in vacuum or pressure levels within the interstice.
- a. Pressure readings shall be able to detect a 50 percent change from one month to the next, or any change in pressure exceeding 50 percent of the initial level or of a pressure level that is reestablished at the time of an incident investigation or annual testing of the gauge, and for vacuum systems, any complete loss of vacuum or positive pressure reading. Vacuum or pressure refreshment must be performed in accordance with manufacturer's specifications and the system's equipment registration in subsection 62-762.851(2), F.A.C. Any change indicated above is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- b. Liquid-filled gauges shall be calibrated using NIST traceable standards prior to initial operation. The gauges shall be operational at all times.
- 7. Visual monitoring of normally dry interstices. This method shall be able to detect the presence of liquid at a low point of the interstice. Any presence of water, other than condensate, or regulated substances in the interstice is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
- 8. Visual monitoring of dike fields. This method shall be able to detect the presence of regulated substances at a low point in the dike field. The accumulation of water or condensation in the low point of the dike field shall not interfere with the ability to detect regulated substances. Any release of regulated substances in the dike field is considered a positive response and shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
 - (3) Storage tanks without secondary containment.
 - (a) Required release detection methods.
- 1. Storage tanks that are exempt from secondary containment shall have monthly visual inspections performed in accordance with paragraph 62-762.602(1)(e), F.A.C.
 - 2. Storage tanks, except those containing high viscosity product, shall have one of the following methods of release detection:
 - a. Electronic sensing equipment installed beneath the storage tank.
 - b. External monitoring using tracer or helium testing systems registered in accordance with subsection 62-762.851(2), F.A.C.
 - c. Another method registered in accordance with subsection 62-762.851(2), F.A.C.
- (b) Performance Requirements. Single-walled release detection systems shall be designed and constructed to allow monitoring of the tank for the purpose of discovering if an incident has occurred. Single-walled release detection systems shall be constructed and installed so that groundwater, rainfall, or soil moisture will not render the testing or sampling method inoperative.
- 1. Electronic sensing equipment placed externally around storage tanks that involve the use of electronic sensors, probes, or fiber-optic systems shall be tested at least annually at intervals not exceeding 12 months to verify that they operate properly. 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 registration for that system.

- 2. Visual inspections of field erected storage tanks shall include an inspection of the exterior of each tank, the integral piping system, the dike field area, and any other storage system components.
- (4) Small diameter integral piping with secondary containment associated with field erected storage tank systems shall meet the requirements of subsection 62-762.601(4), F.A.C.
- (5) Bulk product piping and hydrant piping with secondary containment shall have one or more of the release detection methods in subsection 62-762.602(2), F.A.C.
- (6) Bulk product and hydrant piping without secondary containment. Single-walled bulk product and hydrant piping in contact with the soil, except those containing high viscosity product, shall have one or more of the following release detection methods:
- (a) An annual line pressure test performed in accordance with *Recommended Practice for the Pressure Testing of Steel Pipelines for the Transportation of Gas, Petroleum Gas, Hazardous Liquids, Highly Volatile Liquids, or Carbon Dioxide*, API RP 1110, 6th Edition, February 2013, hereby adopted and incorporated by reference, and available from the Department address listed in subsection 62-762.211(1), F.A.C., or from the publisher at API, 1220 L Street, N.W., Washington, DC 20005, (202)682-8000, or at http://www.api.org/, regardless of the date of installation of the piping.
- (b) External monitoring shall be performed in accordance with the requirements of paragraph 62-762.602(1)(d), F.A.C., if designed to detect a discharge from any portion of the integral piping. External release detection methods using fiber optic, acoustic, helium, cable, and chemical marker release detection methods shall be performed monthly, or annually at intervals not exceeding 12 months if approved by a Nationally Recognized Testing Laboratory as having a 0.2 gallon per hour leak rate detection capability.
- (c) Internal release detection methods, other than pressure testing, which are registered in accordance with subsection 62-762.851(2), F.A.C., shall be able to detect a leak of 0.2 gallon per hour with a probability of detection of 0.95, and a probability of false alarm of 0.05. Internal release detection systems meeting the 0.2 gallon per hour threshold shall be performed annually at intervals not exceeding 12 months. Annual pigging of bulk product piping can be performed as a method of internal release detection instead of other methods specified above. The pigging must provide ultrasonic thickness, magnetic flux, or other data that demonstrates that the piping does not have holes or sources where product leaks from the pipe.
- (d) Bulk product and hydrant piping not in contact with the soil shall be visually inspected in accordance with paragraph 62-762.602(1)(e), F.A.C., monthly but not exceeding 35 days.
- (7) Annual operability testing of release detection systems. All release detection devices shall be tested annually at intervals not exceeding 12 months to ensure proper operation. The test must either simulate an actual alarm condition or shall be conducted according to manufacturer's specifications, and shall include, at a minimum, a determination of whether the device operates as designed. Remote testing of the system can be performed by the manufacturer if the remote test is included in the third-party certification by a Nationally Recognized Testing Laboratory.
- (8) Records shall be kept for three years generated on or after January 11, 2017. Records generated before January 11, 2017, are required to be kept for two years, in accordance with Rule 62-762.711, F.A.C.

Rulemaking Authority 376.303 FS. Law Implemented 376.303, 403.091 FS. History-New 1-11-17.

62-762.611 Release Detection Methods.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Repealed 1-11-17.

62-762.641 Performance Standards for Release Detection Methods.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Repealed 1-11-17.

62-762.701 Repairs, Operation and Maintenance of Shop Fabricated Storage Tank Systems.

- (1) Repairs.
- (a) Repairs shall be performed if any component of a storage tank system has:
- 1. A release or discharge, or has contributed to a release or discharge of a regulated substance, or
- 2. The presence of groundwater in the interstice of an underground double-walled pipe, or
- 3. An operational or structural problem that could potentially result in a release or discharge, or lead to the presence of water in the interstice of a storage tank or integral piping other than condensate.
 - (b) The storage tank system shall immediately cease operating, dispensing, and accepting deliveries, if:

- 1. Repairs are required for any component of a storage tank system; and,
- 2. The nature of the repair activities or the condition of the component cannot be otherwise isolated from the storage tank system. The restrictions against operating the storage tank system shall not apply if the storage tank system contains fuels used solely for the generation of electricity by an electric utility as defined in Chapter 366, F.S., where the removal of the storage tank system from use would result in the shutdown of electrical generating units serviced by the storage tank system.
 - (c) Repairs shall be made:
- 1. To restore the structural integrity of the storage tank system and in a manner that will prevent releases or discharges from structural failure for the remaining operational life of the storage tank system; and,
 - 2. In accordance with manufacturer's specifications and applicable reference requirements.
- (d) Repairs shall be evaluated and performed in accordance with *Standard for Repair of Shop Fabricated Aboveground Tanks*, STI SP031, 4th Edition, November 2008, hereby adopted and incorporated by reference, and available from the address listed in subsection 62-762.211(1), F.A.C., or from the publisher at STI, 944 Donata Court, Lake Zurich, IL 60047, (847)438-8265, or at https://www.steeltank.com/, or other equivalent procedures, regardless of the date of installation of the storage tank system or storage tank system component.
- (e) Repaired tanks, integral piping, sumps, and spill containment systems shall be integrity tested for liquid tightness before being placed back into operation.
- (f) Piping that is damaged or that has caused a discharge of a regulated substance shall be replaced or repaired. Repairs of pipe sections, sump penetration fittings, and pipe fittings shall be made in accordance with applicable requirements in subsections 62-762.501(3) and (4), F.A.C. Replacement of additional lengths of single-walled piping in contact with the soil are exempt from the requirements for secondary containment, provided that:
- 1. The piping system does not have, or will not have to install, secondary containment until the deadlines established in Rule 62-762.501, F.A.C.; and,
- 2. The length of replacement or additional piping is less than 25 percent of the total length of the existing integral piping for the individual tank, or 100 feet, whichever is more for each repair event.
 - (2) Cathodic and corrosion protection.
- (a) Cathodic and corrosion protection systems shall be operated and maintained to provide continuous corrosion protection to the metal components of those portions of the storage tank and integral piping in contact with the soil or within interstitial spaces using vapor corrosion inhibitor technologies.
 - (b) Inspection and testing requirements.
- 1. Storage tank systems equipped with cathodic protection, regardless of the date of installation of the storage tank system or storage tank system component, must be inspected, tested, and evaluated by or under the direction of a Corrosion Professional within six months of installation or repair and at least every year, or every three years for factory installed (galvanic) cathodic protection systems, thereafter in accordance with the criteria contained in SP0169-2013, 2013 Edition, incorporated by reference in subparagraph 62-762.501(3)(c)2., F.A.C., and External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection, NACE Standard SP0285-2011, 2011 Edition, hereby adopted and incorporated by reference, and available in paragraph 62-762.211(2)(g), F.A.C., regardless of the date of installation of the storage tank system or storage tank system component. All cathodic protection systems shall either have permanent test stations for soil-to-structure potential measurements or use temporary field test stations for required testing in accordance with this subparagraph.
- 2. Storage tank systems equipped with impressed current systems shall be inspected at intervals not exceeding once every 60 days. 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 2,976 hours in one year shall be assessed within 30 days 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 or be taken out-of-service and assessed by a Corrosion Professional before being returned to service.
- (c) Records of the continuous operation of impressed current systems and all cathodic protection inspection, testing, and repair activities shall be maintained in accordance with paragraph 62-762.711(3)(c), F.A.C.
- (d) Storage tank systems with cathodic protection systems that have been determined by a Corrosion Professional that the cathodic protection system cannot achieve or maintain protection levels in accordance with the design criteria shall:

- 1. Be repaired within 90 days in accordance with paragraph 62-762.701(1)(c) or 62-762.702(1)(c), F.A.C., or
- 2. Be closed in accordance with subsection 62-762.801(2) or 62-762.802(3), F.A.C.
- (3) Vapor Corrosion Inhibitor Systems.
- (a) Vapor Corrosion Inhibitor systems, if installed, shall be operated and maintained to provide continuous corrosion protection to the metal surfaces within the interstitial spaces of storage tanks, piping and other enclosed spaces for storage tank systems.
 - (b) Inspection and testing requirements.
- 1. Storage tank systems equipped with VCI protection must be inspected, tested, and evaluated by or under the direction of a Corrosion Professional within six months of installation or repair and at least every year thereafter.
 - 2. Systems using vapor corrosion inhibitor technology must be tested in accordance with manufacturer's instructions.
- (c) Records of the continuous operation of VCI systems and all inspection, testing, and repair activities shall be maintained in accordance with paragraph 62-762.711(3)(c), F.A.C.
- (d) Storage tank systems with VCI protection systems that have been determined by a Corrosion Professional that the VCI system requires replenishing shall:
 - 1. Be replenished or replaced within 90 days and be retested within 90 days from the date of replenishment, or
 - 2. Be closed in accordance with subsection 62-762.801(2), F.A.C.
 - (4) Operation and maintenance.
 - (a) Integrity testing.
- 1. The integrity of secondary containment systems and interstitial spaces, regardless of the date of installation of the storage tank system or storage tank system component, shall be verified by performing an interstitial or containment integrity test in accordance with manufacturer's specifications or PEI/RP1200-12, 2012 Edition, incorporated by reference in subparagraph 62-762.501(1)(b)8., F.A.C. Secondary containment systems that use vacuum, pressure, or liquid level (hydrostatic) monitoring for release detection are exempt from this requirement. The interstitial or containment integrity tests shall be performed in accordance with the following schedule:
- a. Double-walled storage tanks and below-grade double-walled piping shall be tested at the time of installation and at the time of any subsequent repair,
 - b. Below-grade piping sumps shall be tested by October 13, 2018, and every three years thereafter,
 - c. Below-grade dispenser sumps shall be tested by October 13, 2018, and every three years thereafter,
- d. Below-grade spill containment systems shall be tested within one year of January 11, 2017, and at intervals not exceeding every three years thereafter; and,
 - e. Below-grade hydrant sumps shall be tested within one year of January 11, 2017, and every three years thereafter.
- 2. Any integrity test that indicates that the component is not tight shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
 - (b) Water removal.
- 1. Spill containment systems, interstitial spaces, dispenser sumps, and piping sumps shall be maintained to provide access for examination and water removal. Water in excess of one inch in depth, or any regulated substances collected in secondary containment, spill containment systems, or in piping sumps, and dispenser sumps shall be removed within 72 hours of discovery, and be either reused or properly disposed.
- 2. Petroleum Contact Water. Petroleum contact water from storage tank systems shall be managed in accordance with Chapter 62-740, F.A.C.
 - (c) Exterior Coatings shall be maintained to prevent corrosion.
 - (5) Stormwater management for secondary containment systems.
- (a) The removal of stormwater from a facility should be performed in accordance with all applicable Department rules. Owners and operators are advised that other federal, state, or local requirements may apply to these activities.
 - (b) Accumulated stormwater shall:
- 1. Be drawn off within one week after a rainfall event unless another frequency is allowed by the facility's stormwater discharge permit or by another instrument, such as a Spill Prevention Control Countermeasure Plan or a Department permit; and,
 - 2. Not be discharged without treatment if it has free product, a visible sheen, sludge, or emulsion of regulated substances.
- (c) If gravity drain pipes are used to remove water from the dike field areas, all valves shall be kept closed except when the operator is in the process of draining water.

- (d) The removal of stormwater from a dike field area or secondary containment system can be continuously removed through equipment registered in accordance with subsection 62-762.851(2), F.A.C., which is designed to allow filtration of water and prevent discharges of contaminated water.
- (6) Evaluation and testing of single-walled metallic bulk product and hydrant piping systems in contact with the soil associated with shop fabricated storage systems shall meet the requirements of subsection 62-762.702(7), F.A.C.

Rulemaking Authority 376.303 FS. Law Implemented 376.303, 403.091 FS. History-New 6-21-04, Amended 1-11-17.

62-762.702 Repairs, Operation and Maintenance of Field Erected Storage Tank Systems.

- (1) Repairs.
- (a) Repairs shall be performed if any component of a storage tank system has:
- 1. A release or discharge or has contributed to a release or discharge of a regulated substance, or
- 2. The presence of groundwater in the interstice of an underground double-walled pipe, or
- 3. An operational or structural problem that could potentially result in a release or discharge, or lead to the presence of water in the interstice of a storage tank or integral piping other than condensate.
 - (b) The storage tank system shall immediately cease operating and accepting deliveries, if:
 - 1. Repairs are required for any component of a storage tank system; and,
- 2. The nature of the repair activities or the condition of the component cannot be otherwise isolated from the storage tank system. The restrictions against operating the storage tank system shall not apply if the storage tank system contains fuels used solely for the generation of electricity by an electric utility as defined in Chapter 366, F.S., where the removal of the storage tank system from use would result in the shutdown of electrical generating units serviced by the storage tank system.
 - (c) Repairs shall be made:
- 1. To restore the structural integrity of the storage tank system and in a manner that will prevent releases or discharges from structural failure or corrosion for the remaining operational life of the storage tank system; and,
 - 2. In accordance with manufacturer's specifications and applicable reference requirements.
 - (d) Repaired components shall be integrity tested for liquid tightness before being placed back into operation.
- (e) Piping that is damaged or that has caused a discharge of a regulated substance shall be replaced or repaired. Repairs of pipe sections, sump penetration fittings and pipe fittings shall be made in accordance with applicable requirements in subsections 62-762.502(3) and (4), F.A.C. Replacement of additional lengths of single-walled piping in contact with the soil are exempt from the requirements for secondary containment, provided that:
- 1. The piping system does not have, or will not have to install secondary containment until the deadlines established in Rule 62-762.502, F.A.C.; and,
- 2. The length of replacement or additional piping is less than 25 percent of the total length of the existing integral piping for the individual tank, or 100 feet, whichever is more for each repair event.
 - (2) Cathodic and corrosion protection.
- (a) Cathodic and corrosion protection systems shall be operated and maintained to provide continuous corrosion protection to the metal components of those portions of the storage tank and integral piping in contact with the soil or within interstitial spaces using vapor corrosion inhibitor technologies.
 - (b) Inspection and testing requirements.
- 1. Storage tank systems equipped with cathodic protection, regardless of the date of installation of the storage tank system or storage tank system component, must be inspected, tested, and evaluated by or under the direction of a Corrosion Professional within six months of installation or repair and at least every year, or every three years for factory installed (galvanic) cathodic protection systems, thereafter in accordance with the criteria contained in SP0169-2013, 2013 Edition, incorporated by reference in subparagraph 62-762.501(3)(c)2., F.A.C., and SP0285-2011, 2011 Edition, incorporated by reference in subparagraph 62-762.701(2)(b)1., F.A.C. All cathodic protection systems shall either have permanent test stations for soil-to-structure potential measurements or use temporary field test stations for required testing in accordance with this subparagraph.
- 2. Storage tank systems equipped with impressed current systems shall be inspected at intervals not exceeding 60 days. 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 2,976 hours in one year shall be assessed within 30 days 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 or taken out-of-service and assessed by a Corrosion Professional before being returned to service.

- (c) Records of the continuous operation of impressed current systems and all cathodic protection inspection, testing, and repair activities shall be maintained in accordance with paragraph 62-762.711(3)(c), F.A.C.
- (d) Storage tank systems with cathodic protection systems that have been determined by a Corrosion Professional that the cathodic protection system cannot achieve or maintain protection levels in accordance with the design criteria shall:
 - 1. Be repaired within 90 days in accordance with paragraph 62-762.702(1)(c), F.A.C., or
 - 2. Be closed in accordance with subsection 62-762.802(3), F.A.C.
 - (3) Vapor Corrosion Inhibitors Systems.
- (a) Vapor Corrosion Inhibitor systems, if installed, shall be operated and maintained to provide continuous corrosion protection to the metal surfaces within the interstitial spaces of storage tanks, piping and other enclosed spaces for storage tank systems.
 - (b) Inspection and testing requirements.
- 1. Storage tank systems equipped with VCI protection must be inspected, tested, and evaluated by or under the direction of a Corrosion Professional within six months of installation or repair and at least every year thereafter.
 - 2. Systems using vapor corrosion inhibitor technology must be tested in accordance with manufacturer's instructions.
- (c) Records of the continuous operation of VCI systems and all inspection, testing, and repair activities shall be maintained in accordance with paragraph 62-762.711(3)(c), F.A.C.
- (d) Storage tank systems with VCI protection systems that have been determined by a Corrosion Professional that the VCI system requires replenishing shall:
- 1. Be replenished or replaced within 90 days of the determination, and be retested within 90 days from the date of replenishment, or
 - 2. Be closed in accordance with subsection 62-762.802(3), F.A.C.
 - (4) Operation and maintenance.
 - (a) Integrity testing
- 1. The integrity of secondary containment systems and interstitial spaces shall be verified by performing an interstitial or containment integrity test in accordance with API Std 653, November 2014, incorporated by reference in subsection 62-762.411(3), F.A.C.; API 570, November 2009, incorporated by reference in subsection 62-762.411(3), F.A.C.; or PEI/RP1200-12, 2012 Edition, incorporated by reference in subparagraph 62-762.501(1)(b)8., F.A.C., as applicable, regardless of the date of installation of the storage tank system. Secondary containment systems that use vacuum, pressure, or liquid level (hydrostatic) monitoring for release detection are exempt from this requirement. The interstitial or containment integrity tests shall be performed in accordance with the following schedule:
- a. Double-walled storage tanks and below-grade double-walled piping shall be tested at the time of installation and at the time of any subsequent repair,
 - b. Below-grade piping sumps shall be tested by October 13, 2018, and every three years thereafter,
- c. Below-grade spill containment systems shall be tested within one year of January 11, 2017, and at intervals not exceeding every three years thereafter; and,
 - d. Below-grade hydrant sumps shall be tested within one year of January 11, 2017, and every three years thereafter.
- 2. Any integrity test that indicates that the component is not tight shall be reported and investigated as an incident pursuant to Rule 62-762.431, F.A.C.
 - (b) Water removal.
- 1. Interstitial spaces and sumps shall be maintained to provide access for examination and water removal. Water in excess of one inch in depth, or any regulated substances collected in secondary containment or in sumps shall be removed within 72 hours of discovery and be either reused or properly disposed.
- 2. Petroleum Contact Water. Petroleum contact water from storage tank systems shall be managed in accordance with Chapter 62-740, F.A.C.
 - (c) Exterior Coatings shall be maintained to prevent corrosion.
 - (5) Stormwater management for secondary containment systems.
- (a) The removal of stormwater from a facility should be performed in accordance with all applicable Department rules. Owners and operators are advised that other federal, state, or local requirements apply to these activities.

- (b) Accumulated stormwater shall:
- 1. Be drawn off within one week after a rainfall event unless another frequency is allowed by the facility's stormwater discharge permit or by another instrument, such as a Spill Prevention Control Countermeasure Plan or a Department permit; and,
 - 2. Not be discharged without treatment if it has free product, a visible sheen, sludge, or emulsion of regulated substances.
- (c) If gravity drain pipes are used to remove water from the dike field areas, all valves shall be kept closed except when the operator is in the process of draining water.
- (d) The removal of stormwater from a dike field area or secondary containment system can be continuously removed through equipment registered in accordance with subsection 62-762.851(2), F.A.C., that is designed to allow filtration of water and prevent discharges of contaminated water.
- (6) Evaluation and testing. Tanks shall be evaluated and the re-testing frequency established and implemented in accordance with API Std 653, November 2014, incorporated by reference in subsection 62-762.411(3), F.A.C. Storage tanks shall be evaluated at the time of installation. Evaluations shall be certified by a professional engineer licensed in the State of Florida, or approved by an API Std 653 certified inspector. Non-destructive testing shall be performed by qualified personnel as specified in API Std 650, incorporated by reference in subsection 62-762.201(67), F.A.C., and API Std 653, November 2014. All field erected tanks shall be repaired in accordance with API Std 653, November 2014. Field erected tanks with storage capacities of less than 250,000 gallons may be evaluated in accordance with STI SP001, Revised 2011, incorporated by reference in subsection 62-762.411(3), F.A.C., in lieu of API Std 653, November 2014.
- (7) Evaluation and testing of single-walled metallic bulk product and hydrant piping systems. Single-walled metallic bulk product and hydrant piping systems in contact with the soil, excluding those containing high viscosity products, shall be evaluated and the re-testing frequency established and implemented in accordance with API 570, November 2009, incorporated by reference in subsection 62-762.411(3), F.A.C. Evaluations shall be certified by a professional engineer licensed in the State of Florida or by an API 570 certified inspector. Non-destructive testing shall be performed by qualified personnel as specified in API 570, November 2009. All single-walled metallic bulk product and hydrant piping systems in contact with the soil shall be repaired in accordance with API 570, November 2009.

Rulemaking Authority 376.303 FS. Law Implemented 376.303, 403.091 FS. History–New 1-11-17.

62-762.711 Recordkeeping.

- (1) All records, whether in paper or electronic format, shall be dated 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 business days of receipt of the Department's or county's request. Site access to the facility shall be provided for compliance inspections conducted at reasonable times.
- (2) Records of the following generated on or after January 11, 2017, are required to be kept for three years. Records of the following generated before January 11, 2017, are required to be kept for two years:
 - (a) Repair, operation, and maintenance records;
- (b) All release detection results, including a record or summary of the alarm history, sensor status, and testing results for electronic systems, performed in accordance with paragraphs 62-762.601(1)(e) and 62-762.602(1)(e), F.A.C.;
 - (c) All test data and results gathered during annual operability tests and integrity tests; and,
 - (d) Records of the types of fuels stored per tank.
 - (3) Records of the following, shall be maintained until storage tank system closure:
 - (a) Manufacturer's instructions for operation, maintenance, and testing for release detection equipment;
 - (b) Records of storage tank system installations, replacements, recertifications, and upgrades;
- (c) Records of installation, maintenance, inspections, and testing of cathodic and corrosion protection systems in accordance with NACE, a Corrosion Professional or STI standards;
 - (d) Survey drawings as specified in paragraphs 62-762.501(1)(i) and 62-762.502(1)(i), F.A.C.;
 - (e) A copy of all INFs, and the results of all incident investigations as specified in Rule 62-762.431, F.A.C.;
 - (f) A copy of all DRFs;
 - (g) A copy of all documents required in Rules 62-762.801 and 62-762.802, F.A.C., if the location continues as a facility;
 - (h) Results of internal inspections and non-destructive testing;
 - (i) Records documenting compliance with subparagraphs 62-762.501(1)(b)3. and 62-762.502(1)(b)3., F.A.C., for storage tanks

systems with secondary containment constructed of concrete installed after January 11, 2017; and,

- (j) Records to demonstrate insurance as the method of financial responsibility for storage tank systems shall be maintained in permanent form if no contamination has been reported or if no Site Rehabilitation Completion Order (SRCO) has been issued pursuant to Chapter 62-780, F.A.C. Records demonstrating financial responsibility for storage tank systems through other permitted methods shall be maintained for the duration of the effective period of that financial responsibility method.
 - (4) The Department strongly encourages that all records relating to financial responsibility be maintained permanently.

Rulemaking Authority 376.303 FS. Law Implemented 376.303, 403.091 FS. History-New 6-21-04, Amended 1-11-17.

62-762.801 Out-of-Service and Closure Requirements for Shop Fabricated Storage Tank Systems.

- (1) Out-of-service storage tank systems.
- (a) Storage tank systems that are taken out-of-service, as required in this subsection shall continue to be maintained in accordance with this rule.
 - (b) Facility owners and operators of out-of-service storage tank systems shall:
 - 1. Continue to operate and maintain corrosion protection in accordance with subsection 62-762.701(2), F.A.C.,
 - 2. Continue to maintain and demonstrate financial responsibility pursuant to Rule 62-762.421, F.A.C.,
 - 3. Leave vent lines open and functioning,
- 4. Remove all regulated substances so that no more than one inch in depth or 0.3 percent by weight of the regulated substances remains in the storage tank; and,
 - 5. Secure or close off the system to outside access.
- (c) Release detection device annual operability testing, containment and integrity testing, and annual overfill protection device testing are not required while the system is properly out-of-service. All aforementioned testing shall be up-to-date in accordance with this chapter and indicate proper operation before adding regulated substances to the storage tank system. In addition, storage tank systems that have been out-of-service for more than 365 days must be evaluated in accordance with the following prior to being returned to service:
- 1. STI SP001, Revised 2011, incorporated by reference in subsection 62-762.411(3), F.A.C., regardless of the date of installation of the storage tank system; and,
 - 2. Integrity tested in accordance with Rule 62-762.701, F.A.C., for integral piping in contact with the soil.
- (d) Storage tank systems with secondary containment shall only be designated as out-of-service for a maximum of 10 continuous years. Upon expiration of this time period, the storage tank system must be closed in accordance with paragraph 62-762.801(2)(b), F.A.C.
- (e) Storage tank systems without secondary containment shall not remain in a continuous out-of-service status for more than five years. Upon expiration of this time period, the storage tank system must be closed in accordance with paragraph 62-762.801(2)(b), F.A.C.
 - (2) Closure of storage tank systems.
 - (a) The following storage tank systems must be closed within 90 days in accordance with the provisions of this subsection:
- 1. A storage tank system that is out-of-service, and has not had regulated substances added to or withdrawn from the system for more than:
 - a. Five years for single-walled storage tank systems, or
 - b. 10 years for storage tank systems with secondary containment.
- 2. Upon discovery, a storage tank system that fails to meet or, if required, is not modified to meet the storage tank system requirements of Rule 62-762.501, F.A.C.
- 3. A storage tank system that requires repair pursuant to Rule 62-762.701, F.A.C., but cannot be repaired to operate in accordance with the requirements of this chapter shall be taken out-of-service. If it cannot be repaired within 365 days after being taken out-of-service, it shall be permanently closed.
- 4. A storage tank system where financial responsibility is not maintained and demonstrated, pursuant to Rule 62-762.421, F.A.C., within 90 days of termination of the financial mechanism.
 - (b) Closure of storage tank systems shall be performed by:
- 1. Conducting a Closure Integrity Evaluation for shop fabricated storage tank systems as defined in subsection 62-762.201(8), F.A.C., and completing the Closure Integrity Evaluation Report Form for ASTs 62-762.901(7) (Closure Integrity Report),

incorporated by reference in paragraph 62-762.411(2)(c), F.A.C. The form shall be submitted in paper or electronic format to the appropriate county,

- 2. Removing all liquids and accumulated sludges. The removal and disposal of all liquids and accumulated sludges may be required according to other federal, state, and local requirements,
 - 3. Removing or disconnecting and capping all integral piping,
- 4. Removing and disposing of a storage tank, or in-place closure by rendering the storage tank free of regulated substances and vapors at the time of closure to prevent hazardous explosive conditions, by maintaining the storage tank to prevent future explosive conditions, and by protecting the storage tank from flotation in accordance with Chapter 22 of NFPA 30, 2015 Edition, incorporated by reference in paragraph 62-762.201(36)(a), F.A.C. In lieu of in-place closure or removal, a storage tank may be used to store liquids other than regulated substances. Owners and operators are advised that other federal, state, or local requirements apply that regulate these activities,
- 5. For single-walled storage tanks and single-walled integral piping in contact with the soil, regardless of the date of installation of the storage tank system or storage tank system component, an investigation shall be conducted during closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*, April 2016 Edition, or http://www.flrules.org/Gateway/reference.asp?No=Ref-07699, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference, hereby adopted and incorporated by reference, and available at the address given in paragraph 62-762.211(2)(e), F.A.C.; and,
 - 6. Properly closing monitoring wells associated with closed systems that are not being used for site assessment purposes.
- 7. For single-walled storage tanks and single-walled integral piping that are not in contact with the soil, a visual inspection must be performed.
 - (3) Closure Integrity Report, Closure Report, and Limited Closure Report.
 - (a) Closure Integrity Report.
- 1. A Closure Integrity Evaluation for shop fabricated storage tank systems as defined in subsection 62-762.201(8), F.A.C., must be performed no more than 45 days prior to closure or replacement for all double-walled storage tanks, double-walled integral piping, piping sumps, dispenser sumps, and spill containment systems that are in contact with the soil. A Closure Integrity Report must be completed to document the findings of the Closure Integrity Evaluation.
- 2. A Closure Integrity Evaluation requires a visual assessment of the interstitial space of double-walled storage tanks, double-walled integral piping, double-walled piping sumps, double-walled dispenser sumps, and double-walled spill containment systems that are in contact with the soil to determine if there are any products or pollutants or any water other than condensate present within the interstice. Other methods approved by the manufacturer or the Department such as vacuum, pressure, or inert gases may be used instead of visual observations.
- 3. A Closure Integrity Evaluation for single-walled piping sumps, single-walled dispenser sumps, and single-walled spill containment systems that are completely below-grade requires a hydrostatic test or another test approved by the manufacturer.
 - 4. Storage tank systems and system components not in contact with the soil do not require a Closure Integrity Evaluation.
- 5. The county must be provided with a copy of the Closure Integrity Report as part of the notification process pursuant to paragraph 62-762.411(2)(c), F.A.C.
- 6. A failed Closure Integrity Evaluation requires the reporting of the failed evaluation as an incident in accordance with paragraph 62-762.431(1)(f), F.A.C., and the investigation of the incident in accordance with Rule 62-762.431, F.A.C. If sampling is necessary to determine whether a discharge has occurred, then an investigation shall be conducted during closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*, regardless of the date of installation of the storage tank system or system component being closed.
- 7. The owner or operator who does not conduct a Closure Integrity Evaluation, as required in subparagraph 62-762.801(3)(a)1., F.A.C., before the storage tank system or system component has been removed or closed in-place, regardless of the date of installation of the storage tank system or system component, shall conduct an investigation at the time of closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*.
- (b) Closure Report. In cases where an investigation is conducted at the time of closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*, a Closure Report shall be submitted in writing or electronic format to the county within 60 days of completion of the closure or replacement. The Closure Report shall be prepared in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*.

- (c) Limited Closure Report. Form 62-762.901(8), Limited Closure Report Form for ASTs, incorporated by reference in subsection 62-762.421(2), F.A.C., shall be submitted in writing or electronic format to the county within 60 days of completion of the closure or replacement in the following instances:
 - 1. Where a Closure Integrity Evaluation passed,
- 2. Where a failed Closure Integrity Evaluation was investigated prior to closure and it was demonstrated that a discharge did not occur, or
- 3. Where a Closure Integrity Evaluation or Closure Report were not required because the closure only involved a storage tank system or system components that were not in contact with the soil.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Amended 1-11-17.

62-762.802 Out-of-Service and Closure Requirements for Field Erected Storage Tank Systems.

- (1) Temporary out-of-service. Field erected storage tank systems taken temporarily out-of-service are those that are emptied solely for the purpose of cleaning, routine maintenance, or change of product for a time period exceeding 90 days, but less than 365 days. These storage tank systems shall:
 - (a) Continue to operate and maintain corrosion protection in accordance with subsection 62-762.702(2), F.A.C.;
- (b) Perform release detection monthly in accordance with applicable provisions of Rule 62-762.602, F.A.C., if the tank system has an external release detection method;
 - (c) Leave venting systems open and functioning; and,
 - (d) Be returned to in-service status or be designated as out-of-service within 365 days of being taken temporarily out-of-service.
 - (2) Out-of-service storage tank systems.
- (a) Storage tank systems that are taken out-of-service, as required in this subsection, shall continue to be maintained in accordance with this chapter unless otherwise noted herein.
 - (b) Facility owners and operators of out-of-service storage tank systems shall:
 - 1. Continue to operate and maintain corrosion protection in accordance with subsection 62-762.702(2), F.A.C.,
 - 2. Continue to maintain and demonstrate financial responsibility pursuant to Rule 62-762.421, F.A.C.,
 - 3. Leave vent lines open and functioning,
- 4. Remove all regulated substances so that no more than one inch in depth or 0.3 percent by weight of the regulated substances remains in the storage tank; and,
 - 5. Secure or close off the system to outside access.
- (c) Facility owners and operators of out-of-service storage tank systems shall monitor tank bottom release detection systems or devices annually but not to exceed 12 months. Records of these inspections shall be maintained in accordance with subsection 62-762.711(2), F.A.C. In the event that there is any positive response of a tank bottom release detection device, an INF must be submitted in writing or electronic format and an investigation as to the cause performed pursuant to Rule 62-762.431, F.A.C.
- (d) Release detection device annual operability testing, containment and interstitial integrity testing, and annual overfill protection device testing are not required while the system is properly out-of-service. All aforementioned testing shall be up-to-date in accordance with this chapter and indicate proper operation before adding regulated substances to the storage tank system. In addition, before being returned to service, storage tank systems that have been out-of-service for more than 365 days must be:
- 1. Structurally evaluated in accordance with API Std 653, November 2014, for field erected tanks, incorporated by reference in subsection 62-762.411(3), F.A.C.; and,
 - 2. Integrity tested in accordance with Rule 62-762.702, F.A.C., for integral piping.
- (e) Storage tank systems with secondary containment shall only be designated as out-of-service for a maximum of 10 continuous years. Upon expiration of this time period, the storage tank system must be closed in accordance with paragraph 62-762.802(3)(b), F.A.C.
- (f) Storage tank systems without secondary containment shall not remain in a continuous out-of-service status for more than five years. Upon expiration of this time period, the storage tank system must be closed in accordance with paragraph 62-762.802(3)(b), F.A.C.
- (g) Field erected tanks changing the type of product stored within the tank shall comply with API Std 653, November 2014, incorporated by reference in subsection 62-762.411(3), F.A.C.
 - (3) Closure of storage tank systems.

- (a) The following storage tank systems must be closed within 90 days in accordance with the provisions of this subsection:
- 1. A storage tank system that is out-of-service, and has not had regulated substances added to or withdrawn from the system for more than:
 - a. Five years after January 11, 2017, for single-walled storage tank systems, or
 - b. 10 years after January 11, 2017, for storage tank systems with secondary containment.
- 2. Upon discovery, a storage tank system that fails to meet or, if required, is not modified to meet the Storage Tank System requirements of Rule 62-762.502, F.A.C.
- 3. A storage tank system that requires repair pursuant to Rule 62-762.702, F.A.C., but cannot be repaired to operate in accordance with the requirements of this chapter shall be taken out-of-service. If it cannot be repaired within 365 days after being taken out-of-service, it shall be permanently closed.
- 4. A storage tank system where financial responsibility is not maintained and demonstrated, pursuant to Rule 62-762.421, F.A.C., within 90 days of termination of the financial mechanism.
 - (b) Closure of storage tank systems shall be performed by:
- 1. Conducting a Closure Integrity Evaluation for field erected storage tank systems as defined in subsection 62-762.201(9), F.A.C., and completing the Closure Integrity Evaluation Report Form for ASTs 62-762.901(7) (Closure Integrity Report), incorporated by reference in paragraph 62-762.411(2)(c), F.A.C. The form shall be submitted in paper or electronic format to the appropriate county,
- 2. Removing all liquids and accumulated sludges. The removal and disposal of all liquids and accumulated sludges may be required according to other federal, state, or local requirements,
 - 3. Removing or disconnecting and capping all integral piping,
- 4. Removing and disposing of a storage tank, or in-place closure by rendering the storage tank free of regulated substances and vapors at the time of closure to prevent hazardous explosive conditions, by maintaining the storage tank to prevent future explosive conditions, and by protecting the storage tank from flotation in accordance with Chapter 22 of NFPA 30, 2015 Edition, incorporated by reference in paragraph 62-762.201(36)(a), F.A.C. In lieu of in-place closure or removal, a storage tank may be used to store liquids other than regulated substances. Owners and operators are advised that other federal, state, or local requirements apply that regulate these activities,
- 5. For single-walled storage tanks, and single-walled integral piping in contact with the soil, regardless of the date of installation of the storage tank system or storage tank system component, an investigation shall be conducted during closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*,
 - 6. Properly closing monitoring wells associated with closed systems that are not being used for site assessment purposes; and,
- 7. For single-walled storage tanks and single-walled integral piping that are not in contact with the soil, a visual inspection must be performed to determine if any discharges have occurred.
 - (4) Closure Integrity Report, Closure Report, and Limited Closure Report.
 - (a) Closure Integrity Report.
- 1. A Closure Integrity Evaluation for field erected storage tank systems as defined in subsection 62-762.201(9), F.A.C., must be performed no more than 45 days prior to closure or replacement for all double-walled and double-bottomed storage tanks, double-walled integral piping, and hydrant sumps in contact with soil. Spill containment systems that are completely below-grade also require a Closure Integrity Evaluation. A Closure Integrity Report must be completed to document the findings of the Closure Integrity Evaluation.
- 2. A Closure Integrity Evaluation requires a visual assessment of the interstitial space of double-walled and double-bottomed storage tanks, double-walled integral piping, and double-walled hydrant sumps that are in contact with the soil to determine if there are any products or pollutants or any water other than condensate present within the interstice. Other methods approved by the manufacturer or the Department such as vacuum, pressure, or inert gases may be used instead of visual observations.
- 3. A Closure Integrity Evaluation for single-walled hydrant sumps that are in contact with the soil, and single-walled spill containment systems that are completely below-grade require a hydrostatic test or another test approved by the manufacturer.
 - 4. Storage tank system and system components not in contact with soil do not require a Closure Integrity Evaluation.
- 5. The County must be provided with a copy of the Closure Integrity Report as part of the notification process pursuant to paragraph 62-762.411(2)(c), F.A.C.
 - 6. A failed Closure Integrity Evaluation requires the reporting of the failed evaluation as an incident in accordance with

paragraph 62-762.431(1)(f), F.A.C., and the investigation of the incident in accordance with Rule 62-762.431, F.A.C. If sampling is necessary to determine whether a discharge has occurred, then an investigation shall be conducted during closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*, regardless of the date of installation of the storage tank system or system component being closed.

- 7. The owner or operator who does not conduct a Closure Integrity Evaluation, as required in subparagraph 62-762.802(4)(a)1., F.A.C., before the storage tank system or system component has been removed or closed in-place, regardless of the date of installation of the storage tank system or system component, shall conduct an investigation at the time of closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*.
- (b) Closure Report. In cases where an investigation is conducted at the time of closure in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*, a Closure Report shall be submitted in writing or electronic format to the County within 60 days of completion of the closure or replacement. The Closure Report shall be prepared in accordance with *Instructions for Conducting Sampling During Aboveground Storage Tank Closure*.
- (c) Limited Closure Report. Form 62-762.901(8), Limited Closure Report Form for ASTs, incorporated by reference in subsection 62-762.421(2), F.A.C., shall be submitted in writing or electronic format to the County within 60 days of completion of the closure or replacement in the following instances:
 - 1. Where a Closure Integrity Evaluation passed,
- 2. Where a failed Closure Integrity Evaluation was investigated prior to closure and it was demonstrated that a discharge did not occur or
- 3. Where a Closure Integrity Evaluation or Closure Report were not required because the closure only involved a storage tank system or system components that were not in contact with the soil.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 1-11-17.

62-762.821 Incident and Discharge Response.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Repealed 1-11-17.

62-762.851 Alternative Procedures and Equipment Registration.

- (1) Alternative procedure 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 alternative procedures or requirements on Form 62-762.901(4), Alternative Procedure Form, effective date, January 2017, hereby adopted and incorporated by reference. To obtain copies of this form see Rule 62-762.901, F.A.C., or https://www.flrules.org/Gateway/reference.asp?No=Ref-07691, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
 - (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 this chapter 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 specific provisions of this chapter from which an alternative procedure is sought; 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 alternative 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) The Department shall issue an Order within 60 days of the receipt of a completed Alternative Procedure Form either:

- 1. Approving the request with any conditions necessary to meet the requirements of paragraph 62-762.851(1)(b), F.A.C., or
- 2. Denying the request and stating the reason(s) the request does not make an adequate demonstration that the requirements of paragraph 62-762.851(1)(b), F.A.C., have been met.
- (d) The Department's order shall be agency action, reviewable in accordance with Sections 120.569 and 120.57, F.S. The Department's failure to timely issue an Order does not grant or approve the request.
 - (e) The provisions of this rule do not preclude the use of any other applicable relief provisions.
- (f) Facilities where an alternative procedure was previously approved by the Department may continue to operate using the conditions of the alternative procedure issued by the Department.
 - (2) Registration of storage tank system equipment and release detection systems and methods.
- (a) Owners and operators shall verify at the time of installation that the storage tank system equipment and release detection systems and methods (including equipment and methods that were previously approved by the Department under the former Equipment Approval process) have been registered with the Department.
- (b) Any storage tank system equipment installed after January 11, 2017, must be registered with the Department in accordance with this subsection. Upon discovery, non-registered storage tank system equipment installed after January 11, 2017, must be removed within 90 days, unless registration is applied for or obtained and listed within the 90 day time period.
- (c) Equipment previously approved by the Department under the former Equipment Approval process and installed prior to January 11, 2017, can continue to be used regardless of later non-renewal or removal of registration from the list of registered storage tank system equipment, provided the equipment is still operating as designed and installed.
- (d) Only the storage tank system equipment as stated in this chapter shall be registered by the equipment manufacturer using Form 62-762.901(9), Storage Tank Equipment Registration Form, (Equipment Registration Form) effective date January 2017, hereby adopted and incorporated by reference. To obtain copies of this form see Rule 62-762.901, F.A.C., or http://www.flrules.org/Gateway/reference.asp?No=Ref-07697, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
 The following storage tank system equipment is exempt from registration:
 - 1. Dispensers, dispenser islands, nozzles, and hoses,
 - 2. Manhole and fillbox covers,
 - 3. Valves,
 - 4. Cathodic protection test stations,
 - 5. Metallic piping,
 - 6. Small diameter integral piping not in contact with soil, unless the piping extends over or into surface waters,
 - 7. Vent lines,
 - 8. AST vents; and,
 - 9. Gauges used for vacuum and pressure monitoring.
- (e) Equipment registration requests shall be submitted to the Department in writing or electronic format with a demonstration that the equipment will meet the appropriate performance requirements contained in this chapter. Any approvals or denials received from other states or countries shall be included in the registration request to the Department.
- (f) A third-party demonstration by a Nationally Recognized Testing Laboratory shall be submitted in writing or electronic format 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,
- 3. A professional certification or determination that the equipment meets the performance requirements contained in this chapter,
 - 4. Integrity test requirements and procedures,
 - 5. Annual operability testing procedures for the equipment or release detection system or method; and,
 - 6. Copies of the manufacturer's instructions to maintain the manufacturer's warranty.
- (g) Release detection methods and tank and piping tightness and pressure testing methods must be registered in accordance with this subsection prior to being used.
- (h) The storage tank system equipment and release detection systems and methods registered with the Department under this subsection must be renewed by the equipment manufacturer every five years. Failure to renew will result in removal from the

equipment registration list. Any changes, improvements, or modifications to equipment beyond the scope of the original demonstration by the Nationally Recognized Testing Laboratory will require a renewal of the registration and a new demonstration from a Nationally Recognized Testing Laboratory pursuant to paragraph 62-762.851(2)(f), F.A.C.

- (i) The Department shall only place conditions upon the use of the storage tank system equipment and release detection systems and methods, remove equipment or methods from the list of registered storage tank system equipment, or not renew registration if:
 - 1. The information submitted to the Department is not in accordance with this subsection,
- 2. The equipment does not perform in field application as certified in the third-party certification by a Nationally Recognized Testing Laboratory, or
 - 3. The equipment is not constructed in accordance with the approved registration or applicable Reference Guidelines.

Rulemaking Authority 376.303 FS. Law Implemented 376.303 FS. History-New 6-21-04, Amended 1-11-17.

62-762.891 Mineral Acid Storage Tank Requirements.

The purpose of this rule is to minimize the occurrence and environmental risks of discharges from aboveground storage tanks having capacities greater than 110 gallons that contain hydrobromic, hydrochloric, hydrofluoric, phosphoric or sulfuric acid if at least 20 percent by weight of the solution is one of the five listed acids. Mineral acid storage tank systems are only subject to Rule 62-762.891, F.A.C.

- (1) Definitions. All words and phrases defined in Section 376.321, F.S., shall have the same meaning when used in this rule unless specifically stated otherwise in this rule. See Section 376.321, F.S., for the definition of the following terms: "Aboveground," "Facility," "Flow-through process tank," "Mineral acids," "Nonresidential," "Operator," "Owner," and "Permitted wastewater treatment system." The following words, phrases, or terms used in this rule, unless the context indicates otherwise, shall have the following meaning:
- (a) "Containment and integrity plan" or "CIP" means a document designed, created, and maintained at a facility, which shall be considered a public record and made available pursuant to the provisions of Chapter 119, F.S. The CIP establishes procedures for the inspection and maintenance program for tanks storing mineral acids at that facility. The inspection and maintenance program shall be designed for the chemical and physical characteristics of the specific mineral acid stored, and for the specific materials of construction of the tank. The CIP shall be designed to ensure control of the specific mineral acid for the expected lifetime of the tank. Form 62-762.891(1) Containment and Integrity Plan Certification Form, effective date, January 2017, is hereby adopted and incorporated by reference, and copies are available from the Division of Waste Management, Department of Environmental Protection, M.S. 4500, 2600 Tallahassee, Florida 32399-2400, Blair Stone Road, or http://www.flrules.org/Gateway/reference.asp?No=Ref-07698, or the Department's website https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
- (b) "County" means a locally administered governmental program under contract with the Department to perform compliance verification activities at facilities with storage tank systems within the boundaries stipulated in the applicable contract.
- (c) "Discharge" includes, but is not limited to, any spilling, leaking, seeping, pouring, misapplying, emitting, emptying, or dumping of any mineral acid which occurs and which affects lands and the surface and ground waters of the state.
- (d) "Discovery" means, as related to a discharge, initial detection of mineral acids in ground water or surface water, or the initial detection of soil contamination, resulting from the discharge of mineral acids in quantities greater than the amounts reportable this rule.
 - (e) "Inspection and maintenance plan" means a plan that establishes the procedures used to prevent releases of mineral acids.
- (f) "Liner" means an artificially constructed material of sufficient thickness, density, and composition that will contain the discharge of any specified mineral acid from an aboveground tank until such time as the mineral acid can be neutralized or removed. The liner shall prevent any escape of specified mineral acids or accumulated liquid to the soil, surface water, or groundwater (except through secondary containment as provided in paragraph 62-762.891(1)(g), F.A.C.).
- (g) "Secondary containment" means a system that is used for discharge prevention, and may include one or more of the following devices:
 - 1. A double-walled tank,
- 2. An external liner placed under and around each tank, sealed to its supports, and either designed and built to contain a minimum of 110 percent of the capacity of the largest tank within the containment; or equipped with a drainage system routed to a permitted wastewater treatment system or plant recirculating process system that is capable of containing any accidental release

from the tank, or

- 3. A system or structure constructed such that accidental releases from a tank would be collected by a drainage system within the system or structure and routed to a permitted wastewater treatment system, or plant recirculating process system, or alternative containment system registered with the Department in accordance with Rule 62-762.851, F.A.C.
- (h) "Stationary" means a tank or tanks not meant for multiple site use or that remain in one location at the facility site for a period of 180 days or longer.
- (i) "Tank" means an aboveground stationary device that is constructed primarily of non-earthen materials (e.g., concrete, metal, plastic, glass) that provides structural support and is designed primarily to contain mineral acids. Connected piping from the tank to and including the nearest cutoff valve shall be considered part of the tank for purposes of this definition. "Tank" does not include flow-through process tanks.
 - (2) Applicability.
- (a) The requirements of this rule apply to owners and operators of a facility with an aboveground storage tank with a storage capacity of more than 110 gallons that contains mineral acids.
 - (b) The following systems are exempt from the requirements of this rule:
 - 1. Any mobile or skid tank that is moved at least every 180 days,
 - 2. Any tank containing mineral acids that are less than 20% by weight of the solution,
 - 3. Any tank of 110 gallons or less capacity that contains mineral acids,
 - 4. Any flow-through process tank,
- 5. Any tank that is located in a completely enclosed building where a release of mineral acid would be contained within the building and not result in a discharge; and,
- 6. Any tank containing mineral acids that are regulated as hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act.
 - (3) Registration.
- (a) The owner of any tank containing mineral acids, that was not previously registered, shall register the tank within 10 days of its discovery with the Department on Form 62-762.901(2), Storage Tank Facility Registration Form (Registration Form), incorporated by reference in paragraph 62-762.401(1)(b), F.A.C.
- (b) For tank installations, a completed Registration Form shall be submitted in electronic or paper format to the Department no later than 30 days after mineral acids are put into a tank previously unregistered. The Department encourages the electronic submittal of the Registration Form available online here: http://www.fldepportal.com/go/submit-registration/, or the form can be obtained at http://www.flrules.org/Gateway/reference.asp?No=Ref-07695, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.
- (c) For change in service status or closure pursuant to Rule 62-762.801, F.A.C., a completed Registration Form shall be submitted in paper or electronic format to the Department within 10 days after completion of the change in service status or closure.
- (d) A completed Registration Form shall be submitted in paper or electronic format to the Department within 10 days of the following changes or discovery:
 - 1. Any change in the owner or operator of a facility or of a tank; and,
 - 2. Any change or correction in the information reported on the Registration Form.
 - (4) Registration fees.
 - (a) Registration fees are due from the owner or operator for all registered tanks as indicated in this subsection.
 - (b) Registration fee schedule.
 - 1. Within 30 days after receipt of notification by the Department, the following fees shall be submitted:
 - a. \$50.00 per tank for each initial registration,
 - b. \$25.00 per tank for annual renewal of tanks with capacities of 125,000 gallons or less; and,
- c. One dollar per every 5,000 gallons of storage capacity, per tank, for annual renewal of tanks with capacities of greater than 125,000 gallons.
 - 2. Total annual registration fees for renewals shall not exceed \$2,500.00 per facility.
- (c) Each facility shall receive a registration placard upon payment of all applicable fees. The placard shall be available for inspection by the Department or county and filed with records maintained in accordance with this section.
 - (5) Notification.

- (a) The county shall be notified of the certification or recertification of the CIP or the secondary containment system on Form 62-762.891(1), in writing or electronic format within 10 days of the completion of the form. The form shall be signed by a professional engineer licensed in the State of Florida.
- (b) Notification of incidents. Within 72 hours, or close of the county's next business day, the county shall be notified in writing or electronic format of any release into a secondary containment system of a mineral acid in excess of 110 gallons, or the reportable quantity in effect on July 1, 1991, under the Comprehensive Environmental Response Compensation and Liability Act of 1980, whichever is greater.
- (c) Notification of discharges. Within 24 hours of discovery, or before the close of the county's next business day, a Discharge Report Form 62-762.901(1), incorporated by reference in subsection 62-762.411(5), F.A.C., shall be used to report any discharge in writing or electronic format to the county exceeding:
 - 1. 100 pounds of hydrobromic or hydrofluoric acid,
 - 2. 1,000 pounds of sulfuric acid, or
 - 3. 5,000 pounds of hydrochloric or phosphoric acid.
 - (6) Storage tank system requirements for mineral acid tanks.
 - (a) General.
 - 1. Tanks installed on or before July 1, 1992, shall either be covered under a CIP or have secondary containment.
 - 2. Tanks installed after July 1, 1992, shall have secondary containment.
 - (b) Secondary Containment.
- 1. A professional engineer licensed in the State of Florida shall certify on Form 62-762.891(1) that the tank or tanks have secondary containment.
- 2. Secondary containment shall be recertified on Form 62-762.891(1) by a professional engineer licensed in the State of Florida if a new tank is added to a facility or if there is a structural change to the containment. Secondary Containment does not need to be reviewed and updated for tanks where there has been no structural change to the containment.
- 3. Secondary containment shall be properly maintained. Any cracks, degradation, punctures, or other similar defects to the integrity of the secondary containment shall be repaired. If repairs cannot be made to ensure the tank's original integrity, the tank shall be emptied.
 - (c) Containment and Integrity Plan.
- 1. A professional engineer licensed in the State of Florida shall certify on Form 62-762.891(1) that the tanks covered by the CIP for that facility have been inspected and maintained in accordance with the CIP and that the integrity and containment of the tanks has not been compromised. For purposes of this certification, maintenance will be presumed to have been performed if the professional engineer verifies that records demonstrating compliance with this subsection are available, complete, and indicate proper maintenance.
- 2. The CIP shall include procedures and requirements to minimize the risk of spills, releases, and discharges from tanks. The CIP shall be reviewed, updated, and recertified on Form 62-762.891(1) at least every two years by a professional engineer licensed in the State of Florida. The CIP shall be made available for inspection by the Department or county, and shall address:
- a. An inspection and maintenance program detailing the qualifications of the person providing the inspection, the inspection and routine maintenance procedures, schedules used to evaluate and maintain the integrity of the tank, release detection procedures, and frequency of inspections and proper response to inspection findings,
 - b. Materials of construction for each tank and compatibility of the mineral acid with the construction materials,
- c. Location of surface water bodies near the tank and the potential for discharges to enter the surface water body or to move offsite,
 - d. Discharge response procedures for containment and abatement,
 - e. Cleanup procedures,
 - f. Procedures and equipment for treating spill wastes,
 - g. Procedures for disposing of spill wastes,
- h. Containment and diversionary structures to prevent discharges from entering the nearby surface water bodies or moving offsite; and,
 - i. A demonstration of corrosion protection of the tank if the tank is in contact with the soil.
 - (7) Recordkeeping. The following records, as applicable whether in paper or electronic format, shall be dated 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 business days of the Department's or county's request:

- (a) The current CIP along with an up-to-date Form 62-762.891(1);
- (b) The current certification of secondary containment on Form 62-762.891(1); and,
- (c) A copy of all DRFs.
- (8) Discharge response.
- (a) When evidence of a discharge from a tank is discovered and reported in accordance with paragraph 62-762.891(5)(c), F.A.C., the owner or operator shall:
 - 1. Remove as much of the mineral acid from the tank as necessary to prevent further discharge,
 - 2. Repair the tank in accordance with original design specifications; and,
- 3. If the storage tank cannot be repaired, all mineral acid shall be removed from the tank and the tank shall be permanently closed.
- (b) Any owner or operator of a facility discharging mineral acids shall immediately undertake to contain, remove, neutralize, or otherwise abate the discharge under all applicable Department rules, for example Chapter 62-780, F.A.C.
- (9) Forms. Form 62-762.891(1) Containment and Integrity Plan Certification Form, January 2017, incorporated in paragraph 62-762.891(1)(a), F.A.C., is used by the Division of Waste Management for mineral acid tanks. This form is listed by form number, subject title, and effective date. Copies of the form are available by writing to the Florida Department of Environmental Protection, Division of Waste Management, 2600 Blair Stone Road, M.S. 4500, Tallahassee, Florida 32399-2400, or online at: http://www.flrules.org/Gateway/reference.asp?No=Ref-07698, or the Department's website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference.

Rulemaking Authority 376.322(3), 403.087 FS. Law Implemented 376.320, 376.321, 376.322, 376.323, 376.324, 376.325, 403.087 FS. History—New 6-21-04, Amended 1-11-17.

62-762.901 Storage Tank Forms.

Storage Tank Forms are listed by form number, the subject title, effective date, and include the rule where the form is incorporated by reference. Copies of forms are available by writing to the Division of Waste Management, Florida Department of Environmental Protection, 2600 Blair Stone Road, M.S. 4500, Tallahassee, Florida 32399-2400, or available online at www.flrules.org, or on the Department website at https://floridadep.gov/waste/permitting-compliance-assistance/content/storage-tank-system-rules-forms-and-reference. For electronic submittal of the Registration Form go to http://www.fldepportal.com/go/submit-registration/.

- (1) Form 62-762.901(1) Discharge Report Form, January 2017, incorporated by reference in subsection 62-762.411(5), F.A.C., and referenced in subsection 62-762.201(25), and paragraph 62-762.891(5)(c), F.A.C., and also available online here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07689.
- (2) Form 62-762.901(2) Storage Tank Facility Registration Form, January 2017, incorporated by reference in paragraph 62-762.401(1)(b), F.A.C., and referenced in subsections 62-762.201(51), (61) and (76), F.A.C., and paragraph 62-762.891(3)(a), F.A.C., and also available online here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07695.
- (3) Form 62-762.901(4) Alternative Procedure Form, January 2017, incorporated by reference in paragraph 62-762.851(1)(a), F.A.C., and also available online here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07691.
- (4) Form 62-762.901(6) Incident Notification Form, January 2017, incorporated by reference in subsection 62-762.411(4), F.A.C., and referenced in subsection 62-762.201(37), F.A.C., and also available online here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07692.
- (5) Form 62-762.901(7) Closure Integrity Evaluation Report Form for ASTs, January 2017, incorporated by reference in paragraph 62-762.411(2)(c), F.A.C., and referenced in subsection 62-762.201(1), and subparagraphs 62-762.801(2)(b)1., and 62-762.802(3)(b)1., F.A.C., and also available online here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07693.
- (6) Form 62-762.901(8) Limited Closure Report Form for ASTs, January 2017, incorporated by reference in subsection 62-762.421(2), F.A.C., and referenced in subsection 62-762.201(43), and paragraphs 62-762.801(3)(c), and 62-762.802(4)(c), F.A.C., and also available online here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07696.
- (7) Form 62-762.901(9) Storage Tank Equipment Registration Form, January 2017, incorporated by reference in paragraph 62-762.851(2)(d), F.A.C., and also available online here: http://www.flrules.org/Gateway/reference.asp?No=Ref-07697.

Rulemaking Authority 376.303 FS. Law Implemented 376.303, 376.320, 376.322, 376.323 FS. History-New 1-11-17.