SUFFOLK COUNTY
DEPARTMENT OF HEALTH SERVICES
DIVISION OF ENVIRONMENTAL QUALITY

ARTICLE 18

OF THE
SUFFOLK COUNTY SANITARY CODE

PETROLEUM BULK STORAGE

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ARTICLE 18
PETROLEUM BULK STORAGE

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Numbering

Numbering references in this Article are different than other Articles of the Suffolk County Sanitary Code. Numbering references in this Article are comparable to the references in 6 NYCRR Part 613, Petroleum Bulk Storage.

For reference, the numbering system used in this Article is noted below.

Division	Description	Example
Article	bold number	**Article 18**
Subarticle	two bold numbers separated by hyphen	**Subarticle 760-1801**
section	two bold numbers separated by hyphen followed by a decimal point and a number	**section 760-1801.1**
subdivision	small bold letter in parenthesis	**subdivision (a)-(z)**, then **(aa)**, **(ab)**, …
paragraph	number in parenthesis	paragraph (1)
subparagraph	small Roman number in parenthesis	subparagraph (i)
clause	small italic letter in parenthesis	clause *(a)-(z)*, then *(aa), (ab)*, **…**
subclause	italic number in parenthesis	subclause *(1)*
item	italic Roman numeral in parenthesis	item *(i)*
subitem	italic capital letter in parenthesis	subitem *(A)*

Subarticle 760-1801 General Provision

§760-1801.1 Purpose.

The purpose of this Article is to regulate the bulk storage of petroleum in order to protect public health and the environment.

§760-1801.2 Applicability.

(a) Every facility is subject to the provisions of this Article.

(b) Every carrier is subject to the provisions of sections 760-1802.2(a)(7), 760-1803.2(a)(7), and 760-1804.2(a)(7) of this Article.

(c) Any provision of this Article which imposes a requirement on a facility imposes that requirement on every operator and every tank system owner at the facility, unless expressly stated otherwise.

§760-1801.3 Definitions.

(a) *Aboveground storage tank system or AST system* means any tank system that is not an underground storage tank system.

(b) *Accessible underground area* means an underground area – such as a basement, cellar, shaft, or vault – that allows for the physical inspection of the exterior of the tank.

(c) *Ancillary equipment* means fittings, flanges, valves, pumps, and other devices that are used to distribute, meter, or control the flow of petroleum to and from a tank.

(d) *Building* means any structure with walls and a ceiling used for any occupancy.

(e) *Carrier* means a person who transports petroleum and delivers it into a tank system.

(f) *Category 1 tank system* means any tank system whose tank was installed before December 27, 1986.

(g) *Category 2 tank system* means any tank system whose tank was installed from December 27, 1986 through October 11, 2015.

(h) *Category 3 tank system* means any tank system whose tank was installed after October 11, 2015.

(i) *Cathodic protection* means the prevention of electrolytic corrosion of a metallic structure (tank or piping) by causing it to act as the cathode rather than as the anode of an electrochemical cell.

(j) *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 metal portions of tank systems in contact with the ground. At a minimum, such persons must have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of metal portions of tank systems in contact with the ground.

(k) *Class A Operator* means the individual who has primary responsibility to operate and maintain the UST system(s) at a facility in accordance with applicable requirements of this Article. The Class A Operator typically manages resources and personnel to achieve and maintain compliance with the requirements of this Article.

(l) *Class B Operator* means the individual who has day-to-day responsibility for implementing applicable requirements of this Article. The Class B Operator typically implements field aspects of operation, maintenance, and associated recordkeeping for a UST system.

(m) *Class C Operator* means the individual who has primary responsibility for initially addressing emergencies presented by a spill or release from a UST system. The Class C Operator typically controls or monitors the dispensing or sale of petroleum.

(n) Commissioner means the Commissioner of the Suffolk County Department of Health Services.

(o) *Compatible* means, in the case of two or more substances, able to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the tank system.

(p) *Containment* means equipment that limits or prevents the spread of a petroleum release.

(q) *Corrosion expert* means a person who, by reason of thorough 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 of metal portions of tank systems in contact with the ground. Such a person must be:

(1) a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of metal portions of tank systems in contact with the ground; or

(2) accredited or certified by NACE International as a corrosion specialist or cathodic protection specialist.

(r) *Department* means the Suffolk County Department of Health Services.

(s) *Design capacity* means the amount of petroleum that a tank is designed to hold. If a certain portion of a tank is unable to store petroleum because of its integral design (for example, electrical equipment or other interior components take up space), the design capacity of the tank is thereby reduced. Actions taken to physically alter the design capacity of a tank (such as drilling a hole in the side of the tank so that it cannot hold petroleum above that point) will not change the design capacity of the tank.

(t) *Dielectric material* means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate tank systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the tank system (for example, tank from piping).

(u) *Dispenser system* means equipment located aboveground that meters the amount of petroleum transferred to a point of use outside the tank system, such as a motor vehicle. This system includes the equipment necessary to connect the dispenser to the tank system.

(v) *Environment* means any water, water vapor, land including land surface or subsurface, air, fish, wildlife, biota, and all other natural resources.

(w) *Excavation zone* means the volume containing the UST system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

(x) *Facility* means a single property, or contiguous or adjacent properties used for a common purpose which are owned or operated by the same person or persons, on or in which are located:

(1) one or more tank systems having a combined storage capacity of more than 1,100 gallons (excluding a major facility); or

(2) an underground tank system having a storage capacity that is greater than 110 gallons.

(3) This term does not include:

(i) any operational tank system;

(ii) any temporary tank system;

(iii) any tank system that is part of a facility that has been constructed, acquired, or operated in accordance with a Certificate of Public Convenience and Necessity issued by the Federal Energy Regulatory Commission pursuant to the terms of 15 U.S.C. section 717f;

(iv) any heating oil tank system used for on-premises consumption that is not interconnected to any other heating oil tank system and which has a storage capacity of less than 1,100 gallons, unless such tank system is located on a property that has another tank system or set of tank systems that otherwise independently meets the definition of facility under paragraph (1) or (2) of this subdivision;

(v) any tank system that has a storage capacity of 1,100 gallons or less and is used to store motor fuel for non-commercial purposes (not for resale) at a farm or residence, unless such tank system or systems are located on a property that has another tank system or set of systems that otherwise independently meets the definition of facility under paragraph (1) or (2) of this subdivision;

(vi) any tank system that is used to store or contain asphalt cement (however, a tank system used to store or contain asphaltic emulsions is included);

(vii) any tank system that has been permanently closed in accordance with sections 760-1802.6(b), 760-1803.5(b), or 760-1804.5(b) of this Article;

(viii) pipelines that enter or leave the property;

(ix) any wastewater treatment tank system;

(x) any tank system at a major facility or vessel that is considered a major facility;

(xi) any tank system owned or operated by a State agency;

(xii) any tank system that is located on New York State owned property; or

(xiii) any tank system owned or operated by a public authority created under the Public Authorities Law.

(y) *Facility owner* means any person who has legal or equitable title to the real property of a facility.

(z) *Farm* means a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. Farm includes fish hatcheries, rangeland, and nurseries with growing operations.

(aa) *Flow-through process tank system* means a tank system that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tank systems do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

(ab) *Free product* means petroleum that is present as a nonaqueous phase liquid (for example, liquid that is not dissolved in water.)

(ac) *Group 1 tank system* means a tank system including a tank which:

(1) is located outside a building;

(2) has a design capacity of 1,100 gallons or less;

(3) if interconnected to another tank, the sum of the design capacities of all interconnected tanks is 1,100 gallons or less;

(4) stores kerosene, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, diesel oil, lubricating oil or is an AST storing gasoline; and

(5) is for on-premises consumption for the following purposes only:

(i) heating;

(ii) stand-by electricity generation for electrical outages; or

(iii) irrigation pump power.

(ad) *Group 2 tank system* means a tank system including a tank which:

(1) is located outside a building;

(2) has a design capacity greater than 1,100 gallons or if interconnected to another tank, the sum of the design capacities of all interconnected tanks is greater than 1,100 gallons;

(3) stores kerosene, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, diesel oil, or lubricating oil; and

(4) is for on-premises consumption for the following purposes only:

(i) heating;

(ii) stand-by electricity generation for electrical outages; or

(iii) irrigation pump power.

(ae) *Group 3 tank system* means a tank system including a tank which:

(1) is located inside a building;

(2) stores kerosene, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, diesel oil, or lubricating oil; and

(3) is for on-premises consumption for the following purposes only:

(i) heating;

(ii) stand-by electricity generation for electrical outages; or

(iii) irrigation pump power.

(af) (1) Hazardous substance means:

(i) a substance included on the list provided under 6 NYCRR section 597.3; or

(ii) a hazardous substance mixture.

(2) Hazardous substance does not include petroleum as defined in subdivision (az) of this section, except as may be part of a blend described in section 760-1801.3(ag)(2) of this Article.

(ag) *Hazardous substance mixture* means:

(1) a mixture of any substances covered under section 760-1801.3(af)(1)(i) of this Article; or

(2) a blend that consists of:

(i) less than 70 percent by volume of the substances covered under sections 760-1801.3(az)(1)(i) through (iii) of this Article (singly or in combination);

(ii) one percent or more by volume of one or more substances covered under section 760-1801.3(af)(1)(i) of this Article; and

(iii) no hazardous waste as identified or listed in 6 NYCRR Part 371; or

(3) a blend that consists of:

(i) one percent or more by volume of the substances covered under section 760-1801.3(af)(1)(i) of this Article (singly or in combination);

(ii) any substance not covered under sections 760-1801.3(az)(1)(i) through (iii) of this Article; and

(iii) no hazardous waste as identified or listed in 6 NYCRR Part 371.

(ah) *Heating oil* means petroleum that is No. 1, No. 2, No. 4-light, No. 4-heavy, No. 5-light, No. 5-heavy, or No. 6 technical grade of fuel oil; other residual fuel oils (including Navy Special Fuel Oil, Bunker C, and clarified oil); and other forms of petroleum when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

(ai) *Hydraulic lift tank system* means a tank system holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

(aj) *Install or installation* means the emplacement of a tank system, or any part thereof, in, on, or above the ground. The movement of a tank from one location for use in a different location constitutes the installation of the tank system.

(ak) *Leak, spill, or spillage* means any escape of petroleum from the ordinary container employed in the normal course of storage, transfer, processing, or use. Any escape of petroleum that enters containment (for example, a catch basin) is a spill.

(al) *Leak detection* means determining whether a release of petroleum has occurred from a tank system or a spill has occurred into the interstitial space between the tank system and its secondary barrier or secondary containment around the tank system.

(am) *Lining* means a coating of a material that is bonded firmly to the interior surface of a tank and which is compatible with the petroleum stored.

(an) *Liquid trap* means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

(ao) *Major facility* includes any refinery, storage or transfer terminal, pipeline, deep water port, drilling platform, or any appurtenance related to any of the preceding that is used or is capable of being used to refine, produce, store, handle, transfer, process, or transport petroleum. A vessel will be considered a major facility only when petroleum is transferred between vessels in the waters of the

State of New York. Fueling operations between vessels will not be considered petroleum transfers between vessels for the purposes of this definition. A facility with a combined design capacity of less than 400,000 gallons is not a major facility for the purposes of this Article.

(ap) *Motor fuel* means petroleum that is typically used in the operation of a motor engine, such as motor gasoline, aviation gasoline, jet fuel, or No. 1 or No. 2 diesel fuel.

(aq) *NYCRR* means the official Compilation of Codes, Rules and Regulations of the State of New York prepared by the New York State Department of State and published by Thomson Reuters/West.

(ar) *NYSDEC* means the New York State Department of Environmental Conservation.

(as) *On-premises consumption* means consumed at the site where the tank system containing the fuel is located.

(at) *On-shore major facility* means a major facility that is not a vessel or a drilling platform, is located on or under any land and, if partially or totally located on submerged land, is physically connected to the shore by permanent structures located above the mean high-water level.

(au) *Operational tank system* means a tank system that is integral to, or connected to, equipment or machinery for which the petroleum in the system is used solely for operational purposes. Petroleum in an operational tank system is not consumed in any context (such as being combusted as fuel or used as a raw material in a manufacturing process). Examples of operational tank systems include hydraulic lift tank systems, lubricating oil system reservoirs, electrical cable oil reservoirs, and electrical transformers.

(av) *Operator* means any person who leases, operates, controls, or supervises a facility.

(aw) *Out-of-service* with respect to a tank system means no longer receiving or dispensing petroleum.

(ax) *Overfill* means a spill that occurs when a tank is filled beyond its design capacity.

(ay) *Person* means any individual, public or private corporation, political subdivision, government agency, municipality, co-partnership, association, firm, consortium, joint venture, interstate body, trust, estate, or any other legal entity whatsoever.

(az) (1) *Petroleum* means:

(i) crude oil and any fraction thereof;

(ii) synthetic forms of lubricating oils, dielectric oils, insulating oils, hydraulic oils, and cutting oils;

(iii) any complex blend of hydrocarbons that is not derived from crude oil; or

(iv) any petroleum mixture.

(2) Petroleum does not include:

(i) any hazardous substance covered under subdivision (af) of this section, except as may be part of a blend described in section 760-1801.3(ba)(2) of this Article;

(ii) animal or vegetable oils; or

(iii) substances that are gases at standard temperature and pressure.

(ba) *Petroleum mixture* means:

(1) a mixture of any substances covered under sections 760-1801.3(az)(1)(i) through (iii) of this Article; or

(2) a blend that consists of:

(i) at least 70 percent by volume of the substances covered under sections 760-1801.3(az)(1)(i) through (iii) of this Article (singly or in combination); and

(ii) one or more other substances, except any hazardous waste as identified or listed in 6 NYCRR Part 371; or

(3) a blend that consists of:

(i) one percent or more by volume of the substances covered under sections 760-1801.3(az) (1)(i) through (iii) of this Article (singly or in combination); and

(ii) one or more other substances, other than hazardous substances covered under section 760-1801.3(af)(1)(i) of this Article and hazardous waste as identified or listed in 6 NYCRR Part 371.

(bb) *Pipe or piping* means a hollow cylinder made of non-earthen materials that is used for the conveyance of petroleum, and any outer cylinder acting as secondary containment for a spill from the inner cylinder that conveys petroleum (double-walled piping).

(bc) *Release* means any intentional or unintentional action or omission resulting in the releasing, discharging, spilling, leaking, pumping, pouring, emitting, emptying or dumping of petroleum into the waters of the State or onto lands from which it might flow or drain into said waters, or into waters outside the jurisdiction of the state when damage may result to lands, waters, or natural resources within the jurisdiction of the state. A leak or spill of petroleum into secondary containment, including soil that is used as part of secondary containment, does not constitute a release.

(bd) *Repair* means to restore to working order a tank, a pipe, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, leak detection equipment, or other tank system component that has caused a leak or a suspected leak of petroleum from the tank system or has failed to function properly.

(be) *Replaced* means:

(1) for tanks – the removal of a tank and installation of another tank in the same location;

(2) for piping – the removal of 50 percent or more of piping that is connected to a single tank and installation of other piping, excluding connectors, to that same tank. For tanks with multiple piping runs, this definition applies independently to each piping run.

(bf) *Residence* means a building that is primarily used for dwelling purposes, including any home, apartment building, or nursing home. This term does not include a hospital or hotel.

(bg) *Retail motor fuel facility* means a facility engaged in the business of selling motor fuel to customers for on-road use.

(bh) *Rural and remote area* means an area where one retail motor fuel facility is more than 20 miles from the nearest other retail motor fuel facility.

(bi) *Secondary containment* means containment that prevents any spilled or leaked petroleum from reaching the land or water outside the containment before cleanup occurs.

(bj) *Septic tank* means a watertight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil, and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

(bk) *Spill, spillage or leak* means any escape of petroleum from the ordinary container employed in the normal course of storage, transfer, processing, or use. Any escape of petroleum that enters containment (for example, a catch basin) is a spill.

(bl) *Stationary device* means a device that is not mobile. Examples of stationary devices include tank systems that are fixed or permanently in place on foundations, racks, cradles, or stilts.

(bm) *Storage capacity* means the total volume capacity of a tank system.

(bn) *Stormwater collection system or wastewater collection system* means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of stormwater and wastewater does not include treatment except where incidental to conveyance.

(bo) *Substantial repair or modification* means any repair, removal, addition or replacement of any component of, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, leak detection equipment, secondary containment systems, associated piping or ancillary equipment except for the following:

(1) replacement of any component of, spill prevention equipment, overfill prevention equipment, corrosion protection equipment, leak detection equipment, ancillary equipment, or

associated piping using the same make and model number that does not involve excavation in the vicinity of USTs or piping that routinely contain petroleum;

(2) repairs to a submersible pump and electrical systems;

(3) repainting the exterior surface of the tank with an equivalent coating;

(4) affixing labels to a tank system; or

(5) inspection, testing and calibration that does not involve excavation in the vicinity of any UST or piping that routinely contains petroleum.

(bp) *Subtitle I* means Subtitle I of the Resource Conservation and Recovery Act, 42 U.S.C. sections 6991 – 6991m, entitled "Regulation of Underground Storage Tanks."

(bq) *Surface impoundment* means a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is not an injection well.

(br) *Tag* means a sign that is affixed by the Department or its authorized representative to the fill pipe(s) of a tank system giving notice that delivery is prohibited.

(bs) *Tank* means the portion of a tank system that contains the majority of the petroleum in the tank system. Each section of a compartmented tank will be treated as an individual tank.

(bt) *Tank system* means a stationary device designed to store petroleum that is constructed of non-earthen materials that provide structural support. This term includes all associated piping and ancillary equipment. This term does not include a dispenser system; septic tank; surface impoundment, pit, pond or lagoon; any tank used for emergency spill or overflow containment that is expeditiously emptied after use; stormwater or wastewater collection system; flow-through process tank system; or liquid trap or associated gathering lines directly related to oil or gas production and gathering operations.

(bu) *Tank system owner* means any person who has legal or equitable title to a tank system.

(bv) *Temporary tank system* means an aboveground tank system used or intended to be used on a property for no more than a total of 180 days, whether consecutive or non-consecutive, over a five year period.

(bw) *Tightness test* means a test that is capable of detecting a leak from a tank system of 0.1 gallon per hour with a probability of detection of at least 95 percent and a probability of false alarm of no more than 5 percent (with a threshold for declaring a leak of 0.05 gallon per hour). A tightness test is valid only if it is performed by a person who possesses a Department-issued Tightness Tester's License as outlined in the "Standards and Procedures for Licensing Companies and Individuals for tank and Line Leakage Detection Testing" for the test being performed. The company performing the test must also have a Department-issued Tightness Testing Company License, as outlined in the "Standards and Procedures for Licensing Companies and Individuals for tank and Line Leakage Detection Testing", for the test being performed. The referenced standard is available from the Department upon request.

(bx) *Title 10* means Title 10 of Article 17 of the New York State Environmental Conservation Law entitled "Control of the Bulk Storage of Petroleum."

(by) *Under-dispenser containment or UDC* means containment underneath a dispenser system designed to prevent leaks from the dispenser system from reaching soil or groundwater.

(bz) *Underground piping* means piping that is beneath the surface of the ground or covered by materials. This term does not include piping the exterior of which can be physically inspected, or secondarily contained piping that is located aboveground.

(ca) *Underground storage tank system or UST system* means a tank system that has ten percent or more of its volume beneath the surface of the ground or is covered by materials. This term does not include a tank system situated in an "accessible underground area." A tank system that is covered by materials does not include a tank system where the tank is completely above the surface of the ground and:

(1) the tank is fully enclosed within pre-fabricated secondary containment; or

(2) the tank is insulated in order to store heated petroleum.

(cb) *Used for a common purpose* means that the primary activity at the properties is the same. A common purpose among properties may be shown if the primary activity at each property falls under the same six-digit classification code of the North American Industry Classification System (a standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the United States business economy).

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

(cd) *Waters or waters of the State* means lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State of New York, and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private, which are wholly or partially within or bordering the state or within its jurisdiction.

(ce) *Working capacity* means the portion of the design capacity of a tank that may be filled before engaging the overfill prevention device, reduced by an allowance for freeboard and petroleum expansion.

§760-1801.4 Access to records and facilities.

(a) Upon reasonable notice from the Department, the operator, facility owner, or tank system owner of a facility must allow any designated employee or agent of the Department to review and copy any books, papers, documents and records relating to compliance with this Article.

(b) Any designated employee or agent of the Department may, at reasonable times and upon reasonable notice, enter and inspect a facility for purposes of assuring compliance with provisions of this Article. The tank system owner, operator, or their designee must make available someone to accompany the employee or agent of the Department during their inspection of the facility.

§760-1801.5 Recordkeeping.

(a) Every facility must maintain all records required by this Article (in hard copy or electronic format) a minimum of five years and make them available to the Department within three business days following the Department's request, except for the results of the last 30 days of leak detection monitoring, which must be immediately available at the time of request.

(b) In the case of permanent closure or change-in-service records required under section 760-1802.6(e) of this Article, or permanent closure records required under section 760-1803.5(c) and 760-1804.5(c) of this Article, the facility must transmit a copy of the records to the Department within 30 days after permanent closure or change in service.

§760-1801.6 Powers of the Commissioner.

(a) The Commissioner may make, or cause to be made, or order the facility owner, tank system owner, or operator to make any investigation or study, which, in his/her opinion, is desirable for enforcing this Article or controlling or reducing the potential for contamination of the waters of the State from a release of petroleum. This may include the ordering of a groundwater investigation where information suggests that a release of petroleum may have occurred.

(b) The Commissioner may order the facility owner, tank system owner, operator, or any other person in possession or control of any facility, or agent of such person, to take whatever action is necessary in the opinion of the Commissioner to bring the facility into compliance with the provisions of this Article. Such action may include, but is not necessarily limited to, the following, either singly or in any combination thereof:

(1) ordering tank-testing or the testing of the physical integrity of pipes or any other part of a tank system or ordering the physical testing of the integrity of the entire tank system;

(2) ordering the removal of the contents of a tank system;

(3) ordering the removal or abandonment or reconstruction of any installed tank system or any part thereof installed in contravention of any of the requirements of this Article.

(4) ordering that physical improvements be performed on any tank system and requiring written Department approval prior to use, including such improvements as tank lining removal and replacement, bottom and structural repairs;

(5) ordering the drafting of and/or implementation of contingency plans if there is evidence that such plans may be necessary to protect the public health and the environment from a release of petroleum stored at any particular facility;

(6) ordering the posting of a performance bond or other undertaking either prior to or subsequent to the construction or operation of a tank system within Suffolk County on a case-by-case basis if evidence indicates such may be necessary to protect the public health and the environment from the effects of operating or closing such a tank system.

(c) The Commissioner may require the licensing of persons and/or companies installing, constructing, testing, inspecting or removing tank systems.

(d) Notwithstanding any other provision of this Article, if the Commissioner finds a condition which has the potential for contaminating the waters of the State with petroleum, or which otherwise constitutes an immediate danger to public health and the environment, and determines that it may be prejudicial to the public interest to delay action, he/she may serve an order upon the operator of the facility or site, citing such conditions and specifying the curative measure to be taken and a time period of less than 15 days within which such action will be taken.

(1) Such order may state that a permit is immediately suspended and/or that all operations are to be discontinued forthwith.

(2) Any order requiring specified action, or the cessation of specified activities immediately or within a specified period of less than 15 days, will provide such person notice and an opportunity to be heard. The hearing will be scheduled for a time no more than 15 days after the date the order is served.

§760-1801.7 General Requirements.

(a) No person may sell or transfer to another person an improperly abandoned UST system or land containing an improperly abandoned UST system if the transferor has reason to know of the existence of such a UST system, unless the purchasing party has been made fully aware of the presence of such a system or evidence in writing.

(b) Every tank system appurtenance, such as level monitor, leak detection system, cathodic protection system, etc., will be kept in proper operating condition at all times. Every system will be inspected and tested as per the requirements of this Article and records kept on each inspection.

(c) No person may install, use or maintain the existence of any AST or UST system in Suffolk County, if said system fails to conform to all pertinent provisions of this Article.

§760-1801.8 Variances.

(a) The Department may, upon written request from any person subject to this Article, grant a variance from one or more provisions of this Article. The criteria for a variance from this Article will be governed by this section.

(b) The Commissioner of the Department of Health Services, in his/her discretion, and upon recommendation of the Board of Review, may grant or deny a variance request from the specific provisions of this Article after an application requesting such relief is made and supporting evidence pursuant to this section has been presented to the Board of Review by the applicant.

(c) An application for a variance must:

(1) identify the specific provisions of this Article from which a variance is sought;

(2) demonstrate that the proposed activity will have no adverse impact on public health and the environment;

(3) demonstrate that the proposed activity will be consistent with the provisions of this Article and the Environmental Conservation Law;

(4) demonstrate that the proposed activity will provide environmental protection equal to or greater than the requirements of this Article; and

(5) provide the Department with appropriate evidence that the new or alternative designs, practices, or methods meet the criteria of this section.

(d) In recommending whether the variance will be granted the Board of Review may consider whether the application can be modified so that the project will not need a variance.

(e) For a variance related to separation distances, the following criteria may also be considered:

(1) whether granting the proposed variance may adversely affect the design of an adequate on-site water supply and/or sewage disposal system; and

(2) whether requesting a variance from another municipal entity would alleviate the need for consideration of the variance before the Board, and if it would, whether such a variance request has been made and ruled upon.

(f) In granting any variance, the Department may impose conditions necessary to assure that the activity will have no adverse impact on public health or the environment.

(g) Notwithstanding Suffolk County Sanitary Code Section 760-220, when a facility is currently the subject of a Department enforcement action, no variance request may be submitted which would, if granted, have the effect of continuing an activity or circumstance which constitutes non-compliance with any provision of this Article, unless the Department expressly authorizes the submission of the variance request as part of an enforcement settlement or action. When the Department authorizes the submission of a variance request in writing as part of an enforcement settlement or action, consideration of such variance request shall be subject to independent review by the Board of Review and/or the Commissioner in the ordinary course pursuant to section 760-220 of the Suffolk County Sanitary Code. The Board of Review and/or the Commissioner shall not be bound to approve any such variance request.

(h) No request for a variance from a requirement for which there is a counterpart requirement in 6 NYCRR Part 613 will be approved unless the NYSDEC has been consulted and has approved of the Department's action to grant the variance request.

§760-1801.9 Registration, Permit to Operate and Permit to Construct.

(a) Permit to Operate. Every facility must have a Permit to Operate issued by the Department. The facility must obtain a Permit to Operate or an Interim Permit to Operate from the Department prior to the first receipt of petroleum into a new tank or into a tank system that was substantially repaired or modified in accordance with the Permit to Construct as required in section 760-1801.9(j).

(b) Registration. The facility owner must register every AST and UST system at a facility with the Department. In addition, every temporary tank system must either be included on a new facility registration or be added to an existing facility's registration after 180 days of use, whether consecutive or nonconsecutive, in any 5 year period. The facility owner may rely on a representative authorized in writing by the facility owner to satisfy any obligation imposed on the owner by the provisions of this

section. The facility owner must ensure that the registration information identified in subdivision (f) of this section remains current and accurate.

(c) Transition from earlier regulation. Unless the Permit to Operate must be revised or newly issued pursuant to the terms of subdivision (a) or (e) of this section, a permit held by a facility on the effective date of this Article that was issued pursuant to terms of the Article 12 of the Suffolk County Sanitary Code remains valid until the expiration date recorded on the permit.

(d) Renewal. Every Permit to Operate and Registration must be renewed every three years from the date of the last valid issue date until the Department receives written notice and documentation from the facility owner that the facility has been permanently closed in accordance with section 760-1802.6(b), 760-1803.5(b), or 760-1804.5(b) of this Article, or that ownership of the facility has been transferred in accordance with subdivision (e) of this section.

(e) Application procedure for initial registration or transfer of ownership.

(1) If ownership of the real property on which a facility is located is transferred, the new facility owner must submit an application to initially register the facility with the Department within 30 days after the transfer.

(2) The facility owner must submit a registration application using forms as provided by the Department. Forms are available at the Department's Office of Pollution Control or on the Department's web site.

(3) Each application for an initial registration or transfer of facility ownership must be accompanied by a copy of the current deed for the property at which the facility is located. If the facility is located on multiple properties, deeds for each property must be submitted with the application. If a deed does not exist for a particular property, the application must be accompanied by other evidence of ownership of the property.

(4) The application must be signed by the facility owner.

(5) Every registration application must be accompanied by payment of the applicable per-facility registration fee as shown in the Department's Fee Schedule.

(f) Application procedure for information corrections.

(1) The facility owner must submit information corrections for registered facilities using forms as provided by the Department. Forms are available at the Department's Office of Pollution Control or on the Department's web site.

(2) The registration application must be signed by the facility owner.

(3) Changes in the following registration items are considered information corrections:

(i) contact information;

(ii) Class A or Class B Operator;

(iii) tank system status;

(iv) tank system equipment; or

(v) type of petroleum stored.

(4) No registration fee is required for submitting information corrections.

(g) A facility owner must submit to the Department a registration form listing every Group 1 or 3 AST at least 30 days prior to the planned installation date.

(h) Application procedure for permanent closure or change in service of tank systems. The facility owner must notify the Department at least 30 days prior to the permanent closure or change in service of tank systems using forms as provided by the Department. Forms are available at the Department's Office of Pollution Control or on the Department's web site.

(i) Permit to Operate.

(1) After submittal of a complete registration application and payment of the applicable Permit to Operate fee and upon approval by the Department, the Department will issue a Permit to Operate for tanks approved for use in accordance with subdivision (j) of this section. The current Permit to Operate must be displayed at all times in a conspicuous location at the facility. If a tank is added to a previously permitted facility, any increased fee applicable to the facility will not be assessed until the Permit to Operate is due for renewal.

(2) No person may act or cause any act in contravention of any provision of a Permit to Operate.

(j) Permit to Construct.

(1) Except in the case of a Group 1 AST system or a Group 3 AST system, Category 2 UST systems installed without prior approval from the Department must demonstrate compliance with applicable equipment standards contained in Subarticles 760-1802, 760-1803, and 760-1804 by submitting documents and plans specified in section 760-1806.1.

(2) Except in the case of a Group 1 AST system or a Group 3 AST system, a facility must receive a Permit to Construct from the Department in accordance with Subarticle 760-1806 of this Article, prior to the following:

(i) The substantial repair or modification of a Category 2 AST system or UST System.

(ii) The construction, installation, or substantial repair or modification of a Category 3 AST system or UST system.

(3) The contents of the required submittal for approval are detailed in Subarticle 760-1806. Approval of design by the Department is required before installation, and the determination of adequacy lies in the sole discretion of the Department.

(4) No person may act or cause any act in contravention of any provision of a Permit to Construct issued under Subarticle 760-1806 of this Article.

(5) Any Permit to Construct issued pursuant to Subarticle 760-1806 of this Article will be effective for the specified duration of time indicated thereon, not to exceed one year from the effective date thereof.

(6) Transition provisions for Permits to Construct.

(i) Upon the effective date of Article 18, pending applications to the Department for Permits to Construct submitted under Article 12 of the Suffolk County Sanitary Code with respect to UST or AST systems subject to Article 18 will be deemed applications for Permits to Construct under Article 18.

(ii) Existing Permits to Construct issued under Article 12 of the Suffolk County Sanitary Code for UST and AST systems subject to Article 18 will be deemed Permits to Construct under Article 18 upon the effective date of Article 18.

(k) When a new tank system passes final inspection, an Interim Permit to Operate will be issued which will expire on the date that the facility's existing Permit to Operate expires, if one exists, or If the facility does not have a current Permit to Operate it will expire as noted on the Interim Permit to Operate**.**

§760-1801.10 References.

The following technical standards are incorporated by reference. With the exception of the technical standards listed in subdivisions (a) and (f) of this section, these references are available for inspection and copying at the office of the NYSDEC's Division of Environmental Remediation, located at 625 Broadway, Albany, NY 12233 and the office of the New York State Department of State, Division of Administrative Rules, located at One Commerce Plaza, 99 Washington Avenue, Suite 650, Albany, NY 12231. The technical standards listed in subdivisions (a) and (f) of this section are available for inspection at the office of the NYSDEC's Division of Environmental Remediation, located at 625 Broadway, Albany, NY 12233 and the office of the New York State Department of State, Division of Administrative Rules, located at One Commerce Plaza, 99 Washington Avenue, Suite 650, Albany, NY 12231. All of the technical standards are also available for inspection or purchase from the source listed for the given reference.

(a) American Petroleum Institute (API)
1220 L Street, NW, Washington, DC 20005-4070

(1) RP 651, Cathodic Protection of Aboveground Petroleum Storage Tanks, 3rd edition, January 2007.

(2) RP 1007, Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles, March 2001.

(3) RP 1604, Closure of Underground Petroleum Storage Tanks, 3rd edition, March 1996.

(4) RP 1615, Installation of Underground Hazardous Substances or Petroleum Storage Systems, 6th edition, April 2011.

(5) RP 1631, Interior Lining and Periodic Inspection of Underground Storage Tanks, 5th edition, June 2001.

(6) RP 1632, Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems, 1st edition, January 1983.

(7) RP 1632, Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems, 3rd edition, January 1996 (revised 2002).

(8) RP 1637, Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals, 3rd edition, July 2006.

(9) RP 2016, Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks, 1st edition, August 2001.

(10) RP 2200, Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines, 4th edition, September 2010.

(11) Standard 620, Recommended Rules for Design and Construction of Large, Welded, Low-Pressure Storage Tanks, 7th edition, September 1982 (revised April 1985).

(12) Standard 620, Design and Construction of Large, Welded, Low-Pressure Storage Tanks, 11th edition, February 2008.

(13) Standard 650, Welded Steel Tanks for Oil Storage, 7th edition, February 1984.

(14) Standard 650, Welded Steel Tanks for Oil Storage, 12th edition, March 2013.

(15) Standard 653, Tank Inspection, Repair, Alteration, and Reconstruction, 4th edition, April 2009.

(b) Fiberglass Tank and Pipe Institute (FTPI)
11150 South Wilcrest Drive, Suite 101, Houston, TX 77099-4343

(1) RP T-95-02, Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks, 2nd edition, January 1995.

(c) Ken Wilcox Associates, Inc. (KWA)
1125 Valley Ridge Drive, Grain Valley, MO 64029

(1) Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera, September 1999.

(d) NACE International (NACE)
1440 South Creek Drive, Houston, TX 77084-4906

(1) RP0193-2001, External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms, 2001 edition.

(2) SP0169-2013, Control of External Corrosion on Underground or Submerged Metallic Piping Systems, 2013 edition.

(3) SP0285-2011 (formerly RP0285), Corrosion Control of Underground Storage Tanks by Cathodic Protection, 2011 edition.

(4) TM0101-2012, Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems, 2012 edition.

(5) TM0497-2012, Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems, 2012 edition.

(e) National Fire Protection Association (NFPA)
1 Batterymarch Park, Quincy, MA 02169-7471

(1) NFPA 30, Flammable and Combustible Liquids Code, 1984 edition.

(2) NFPA 30, Flammable and Combustible Liquids Code, 2012 edition.

(3) NFPA 30A, Automotive and Marine Service Station Code, 1984 edition.

(4) NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, 2012 edition.

(5) NFPA 326, Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair, 2010 edition.

(6) NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids, 2012 edition.

(f) Petroleum Equipment Institute (PEI)
P. O. Box 2380, Tulsa, OK 74101-2380

(1) RP100, Recommended Practices for Installation of Underground Liquid Storage Systems, 2011 edition.

(2) RP200, Installation of Aboveground Storage Systems, 2013 edition.

(g) Steel Tank Institute/Steel Plate Fabricators Association (STI/SPFA)
944 Donata Court, Lake Zurich, IL 60047

(1) F841, Standard for Dual Wall Underground Steel Storage Tanks, revised January 2006.

(2) F894, ACT-100®: Specification for External Corrosion Protection of FRP Composite Steel USTs, revised September 2013.

(3) F922, Permatank®: Specification for Permatank®, revised January 2013.

(4) F961, ACT-100U®: Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks, revised September 2013.

(5) R051, Cathodic Protection Testing Procedures for sti-P3® USTs, revised January 2006.

(6) R892, Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems, revised January 2006.

(7) R972, Recommended Practice for the Addition of Supplemental Anodes to sti-P3® USTs, revised December 2010.

(8) SP001, Standard for the Inspection of Aboveground Storage Tanks, 5th Edition, revised September 2011.

(9) sti-P3®, Specifications for sti-P3® System for External Corrosion Protection of Underground Steel Storage Tanks, July 1983.

(10) sti-P3®, Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks, revised September 2013.

(h) Underwriters Laboratories (UL)
333 Pfingsten Road, Northbrook, IL 60062-2096

(1) UL 58, Standard for Steel Underground Tanks for Flammable and Combustible Liquids, April 1981 edition.

(2) UL 58, Standard for Steel Underground Tanks for Flammable and Combustible Liquids, December 1996 edition.

(3) UL 80, Standard for Steel Tanks for Oil-Burner Fuels and Other Combustible Liquids, September 2007 edition.

(4) UL 142, Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, January 1985 edition.

(5) UL 142, Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, December 2006 edition.

(6) UL 971, Standard for Nonmetallic Underground Piping for Flammable Liquids, February 2006 edition.

(7) UL 971A, Metallic Underground Fuel Pipe, October 2006 edition.

(8) UL 1316, Standard for Glass-Fiber-Reinforced Plastic Underground Tanks for Petroleum Products, July 1983 edition.

(9) UL 1316, Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures, January 1994 edition.

(10) UL 1746, Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks, January 2007 edition.

(11) UL 2258, Nonmetallic Tanks for Oil-Burner Fuels and Other Combustible Liquids, August 2010 edition.

(i) Underwriters Laboratories of Canada (ULC)
7 Underwriters Road, Toronto, ON, Canada M1R 3A9

(1) CAN4-S601-M84, Standard for Shop Fabricated Steel Aboveground Horizontal Tanks for Flammable and Combustible Liquids, 1984.

(2) ULC-S601-07, Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids, 2007.

(3) ULC-S603-M1981, Standard for Steel Underground Tanks for Flammable and Combustible Liquids, 1981.

(4) ULC-S603-00, Standard for Steel Underground Tanks for Flammable and Combustible Liquids, 2000.

(5) ULC-S603.1-M1982, Standard for Galvanic Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids, 1982.

(6) ULC-S603.1-11, Standard for External Corrosion Protection Systems, 2011.

(7) CAN4-S615-M83, Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids, 1983.

(8) ULC-S615-98, Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids, 1998.

(9) CAN4-S630-M84, Standard for Shop Fabricated Steel Aboveground Vertical Tanks for Flammable and Combustible Liquids, 1984.

(10) ULC-S660-08, Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids, 2008.

(j) NYSDEC
625 Broadway, Albany, NY 12233-7020

(1) 6 NYCRR Part 613, Petroleum Bulk Storage, October 11, 2015.

(k) Suffolk County Department of Health Services
15 Horseblock Pl. Farmingville, NY 11738

(1) Suffolk County Sanitary Code Article 12, effective January 1, 1980.

(2) Suffolk County Sanitary Code Article 12, amended July 28, 1982.

(3) Suffolk County Sanitary Code Article 12, amended August 29, 1984.

(4) Suffolk County Sanitary Code Article 12, amended April 9, 1986.

§760-1801.11 Severability.

If any provision of this Article or its application to any person or circumstance is held to be invalid, the remainder of this Article and the application of that provision to other persons or circumstances will not be affected.

§760-1801.12 Effect of Adoption of Suffolk County Sanitary Code Article 18 Upon Existing Rights.

The adoption of Suffolk County Sanitary Code Article 18 or the amendment of Suffolk County Sanitary Code Article 12, or any part thereof, shall not affect or impair the County of Suffolk's right, ability or authority to pursue any act done, offense committed or liability, penalty, embargo, or punishment incurred arising out of or in connection with a violation of the Suffolk County Sanitary Code prior to the time such adoption or amendment takes effect, but the same may be asserted, imposed, enforced, or prosecuted by the County of Suffolk, as fully and to the same extent as if such adoption or amendment had not been effected.

Subarticle 760-1802 UST Systems Subject to Both Subtitle I and Title 10

§760-1802.1 UST systems: design, construction, and installation.

(a) Applicability. The provisions of this Subarticle apply to every UST system that is part of a facility except for a UST system that is subject to Subarticle 760-1803 of this Article. Every UST system covered under this Subarticle is subject to regulation pursuant to Subtitle I and Title 10.

(b) Equipment standards for Category 2 and 3 UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills, any facility containing a Category 2 or 3 UST system must meet the following requirements.

(1) Tanks. Every UST must be properly designed and constructed, and any portion underground that routinely contains petroleum must be protected from corrosion, as specified in subparagraphs (i) through (iii) of this paragraph. In addition, every UST must be secondarily contained in accordance with subparagraph (iv) of this paragraph.

(i) Every UST made of fiberglass-reinforced plastic (FRP) must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(a) for Category 2 USTs:

(1) UL 1316, July 1983; or

(2) CAN4-S615-M83, 1983;

(b) for Category 3 USTs:

(1) UL 1316, January 1994; or

(2) ULC-S615-98, 1998.

(ii) Every UST made of steel that is cathodically protected must meet the following conditions:

(a) the UST must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) for Category 2 USTs:

(i) UL 58, April 1981; or

(ii) ULC-S603-M1981, 1981;

(2) for Category 3 USTs:

(i) UL 58, December 1996; or

(ii) ULC-S603-00, 2000;

(b) the UST must be cathodically protected in the following manner:

(1) the UST must be coated with a suitable dielectric material;

(2) the cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(i) for Category 2 USTs:

(A) API RP 1632, January 1983;

(B) ULC-S603.1-M1982, 1982; or

(C) sti-P3®, July 1983;

(ii) for Category 3 USTs:

(A) sti-P3®, September 2013;

(B) UL 1746, January 2007;

(C) ULC-S603.1-11, 2011; or

(D) NACE SP0285-2011, 2011;

(3) every field-installed cathodic protection system must be designed by a corrosion expert; and

(4) every impressed current system must be designed to allow determination of current operating status as required in section 760-1802.2(b)(3) of this Article.

(iii) Every Category 2 UST made of steel that is clad or jacketed with a non-corrodible material must meet the following conditions:

(a) the UST must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) UL 58, April 1981; or

(2) ULC-S603-M1981, 1981.

(b) the tank must be clad with a non-corrodible material according to the following:

(1) the UST must be electrically insulated from the piping with dielectric fittings, bushings, washers, sleeves, or gaskets which are compatible with petroleum, petroleum additives, and corrosive soils;

(2) the UST must have an exterior fiberglass reinforced plastic shell bonded firmly to the steel. This must consist of a base coat of resin five to eight mils (0.005 to 0.008 inch) in thickness overlain by two layers of resin with fiberglass reinforcement with a thickness of at least 85 mils (0.085 inch) after rolling. A final coat of resin must be applied to a thickness of 10 to 15 mils (0.01 to 0.015 inch). The thickness of the completed coating must be a minimum of 100 mils (0.1 inch) after curing. The coating's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the coating and a permanent bond between coating and steel is maintained. The coating must be of sufficient density and strength to form a hard impermeable shell which will not crack, wick, wear, soften, or separate and which must be capable of containing the product under normal service conditions in the event the steel wall is perforated. The coating must be non-corrodible under adverse underground electrolytic conditions and must be compatible with petroleum products and petroleum additives;

(3) The coating must be factory-inspected for air pockets, cracks, blisters, pinholes, and electrically tested at 10,000 volts for coating short circuits or coating faults. Any defects must be repaired. The coating must be factory checked with a Barcol Hardness Tester or equivalent to assure compliance with the manufacturer's minimum specified hardness standard for cured resin.

(iv) Every UST must be secondarily contained according to the following:

(a) the secondarily contained UST must:

(1) be able to contain petroleum leaked from the primary containment until it is detected and removed; and

(2) be able to prevent the release of petroleum;

(b) the tank in a Category 2 UST system must have a secondary containment system which must consist of one of the following:

(1) double-walled USTs. A double-walled UST which is designed and manufactured in accordance with all of the following standards:

(i) the interstitial space of the double-walled UST can be monitored for tightness;

(ii) outer jackets made of steel must have a minimum thickness of 10-gauge and be coated as prescribed in section 760-1802.1(b)(1)(ii)*(b)(1)* or (iii)*(b)(2)* of this Article;

(iii) there are no penetrations of any kind through the jacket to the UST except top entry manways and fittings required for filling the tank, venting the tank, or monitoring the interstitial space;

(iv) the outer jacket must cover 100 percent of the UST except for penetrations referenced in item *(iii)* of this subclause; and

(v) the jacket must be designed to contain an inert gas or liquid at a pressure greater than the maximum internal pressure or be able to contain a vacuum for a period of one month;

(2) vaults. If a vault is used for secondary containment, the vault must be water tight, impervious to leakage of petroleum, and able to withstand chemical deterioration and structural stresses from internal and external causes. The vault must be a continuous structure with a chemical-resistant water stop used at any joint. There must be no drain connections or other entries through the vault except there may be top entry manholes and other top openings for filling and emptying the UST, venting and monitoring, and pumping of petroleum which may leak into the vault.

(c) The tank in a Category 3 UST system must be double-walled and must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) UL 58, December 1996;

(2) UL 1316, January 1994;

(3) UL 1746, January 2007;

(4) STI F841, January 2006; or

(5) STI F922, January 2013.

(v) Containment collars. A UST must have a containment collar surrounding every tank penetration as follows:

(a) when excavation around a Category 2 UST exposes a tank manway or fitting that is not contained within a containment collar , a containment collar must be installed on the UST surrounding the exposed manway or fitting.

(b) for every Category 3 UST:

(1) Every single compartment UST must have at least two containment collars where tank fabrication permits.

(2) For multi-compartment USTs, each compartment must have at least two containment collars where tank fabrication permits.

(vi) Tank Manways. Every single compartment UST must have at least one top entry manway where tank fabrication permits. For multi-compartment USTs, each compartment must have at least one top entry manway where tank fabrication permits.

(2) Piping.

(i) Piping installed on or before October 11, 2015 that routinely contains petroleum and is in contact with the ground must be secondarily contained and properly designed, constructed, and protected from corrosion in accordance with clauses *(a)* through *(c)* of this subparagraph.

(a) Piping made of a non-corrodible material must meet the following conditions.

(1) The materials, joints, and joint adhesives must be compatible with petroleum, petroleum additives, and corrosive soils.

(2) All underground piping must be designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(3) All joints must be liquid and air tight.

(4) All underground piping must be tested for tightness before being covered, enclosed or placed in use. The test must be scheduled such that a representative of the Department may witness the test during the Department's normal business hours. The Department must be given a minimum of three business days' notice prior to the scheduled test.

(b) Piping made of steel that is cathodically protected must meet the following conditions.

(1) The cathodic protection system must provide a minimum of 30 years of protection in corrosive soils.

(2) Cathodic protection must be provided by the use of sacrificial anodes or impressed current.

(3) Where sacrificial anodes or impressed current systems are used, monitors to check on the adequacy of the system must be installed and kept in proper working condition. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the system must be repaired or the piping will be considered unprotected and must be tested for tightness in accordance with section 760-1802.3(d)(2) of this Article.

(4) Except where cathodic protection is provided by impressed current, underground piping must have dielectric bushings, washers, sleeves, or gaskets installed at the end to electrically isolate the piping from the UST and the dispenser. These dielectric connectors must be compatible with petroleum, petroleum additives, and corrosive soils.

(5) All underground piping must be designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(6) All joints must be liquid and air tight.

(7) All underground piping must be tested for tightness in accordance with section 760-1802.3(d)(2) of this Article before being covered, enclosed, or placed in use. The test must be scheduled such that a representative of the Department may witness the test during the Department's normal business hours. The Department must be given a minimum of three business days' notice prior to the scheduled test.

(c) All piping must be secondarily contained and meet the following conditions:

(1) be able to contain petroleum leaked from the primary containment until it is detected and removed; and

(2) be able to prevent the release of petroleum.

(ii) Piping installed after October 11, 2015 that routinely contains petroleum and is in contact with the ground must be secondarily contained and properly designed, constructed, and protected from corrosion in accordance with a code of practice specified in clauses *(a)* through *(c)* of this subparagraph. The entire piping run must be replaced when 50 percent or more of a piping run is replaced, unless the piping run has been constructed in accordance with the requirements of this subparagraph.

(a) All piping made of a non-corrodible material must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) UL 971, February 2006; or

(2) ULC-S660-08, 2008.

(b) All piping made of steel that is cathodically protected must meet the following conditions:

(1) the piping is designed and constructed according to UL 971A, October 2006 (refer to section 760-1801.10 of this Article for complete citation of references);

(2) the piping is coated with a suitable dielectric material;

(3) the cathodic protection system is designed, fabricated, and installed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(i) API RP 1632, January 1996 (revised 2002);

(ii) STI R892, January 2006;

(iii) NACE SP0169-2013, 2013; or

(iv) NACE SP0285-2011, 2011;

(4) any field-installed cathodic protection system is designed by a corrosion expert; and

(5) any impressed current system is designed to allow determination of current operating status as required in section 760-1802.2(b)(3) of this Article.

(c) All piping must be secondarily contained and meet the following conditions:

(1) be able to contain petroleum leaked from the primary containment until it is detected and removed; and

(2) be able to prevent the release of petroleum.

(iii) Every section of piping outside a building which is not in contact with the ground and every section of piping within a building that is not readily visible must be secondarily contained in accordance with section 760-1802.1(b)(2)(ii)*(c)* and must be constructed in accordance with one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(a) piping installed on or before October 11, 2015: NFPA 30 (1984 edition); or

(b) piping installed after October 11, 2015: NFPA 30 (2012 edition).

(3) Spill and overfill prevention equipment. To prevent spilling and overfilling associated with petroleum transfer to the UST system, the facility must use spill and overfill prevention equipment as follows:

(i) spill prevention equipment that will prevent release of petroleum when the transfer hose is detached from the fill pipe. Such equipment must include a secondarily contained spill bucket. The minimum volume of the spill bucket must be:

(a) 15 gallons; or

(b) five gallons so long as the spill bucket is within a liquid-tight sump with leak detection and there is a minimum one inch gap between the top of the spill bucket and the bottom of the manhole cover;

(ii) overfill prevention equipment that will:

(a) automatically shut off flow into the UST when the UST is no more than 95 percent full; or

(b) alert the operator or carrier when the UST is no more than 90 percent full by triggering a Department approved high-level alarm.

(4) Installation.

(i) Every Category 2 UST system must be installed in accordance with section 760-1801.9(j) of this Article and the manufacturer's instructions. This includes repair of any damage to the UST coatings prior to backfilling.

(ii) Every Category 3 UST system must be properly installed according to section 760-1801.9(j) of this Article and to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(a) API RP 1615, April 2011;

(b) PEI RP100, 2011 edition; or

(c) NFPA 30 and 30A, 2012 editions.

(iii) As-built information records and installer certification. The facility must maintain the following information for the life of every Category 2 or 3 UST system:

(a) an accurate diagram:

(1) showing the location of:

(i) each UST and its associated piping, including registration identification number;

(ii) fill ports;

(iii) dispensing equipment;

(iv) check valves;

(v) transition sumps (if any); and

(vi) monitoring or recovery wells (if any).

(2) listing the following attributes for Category 3 UST systems:

(i) physical dimensions of each UST; and

(ii) installation date for each portion of piping installed after October 11, 2015;

(3) indicating at least one visible reference point (for example, facility structure), a frame of reference (for example, north arrow), and scale of the drawing;

(b) for each UST system component installed after October 11, 2015, a signed statement by the installer certifying that the UST system component was installed in compliance with subparagraph (v) of this paragraph; and

(c) for each UST system component installed after October 11, 2015, the completed manufacturer's installation checklist showing that the UST system component was installed in accordance with the manufacturer's instructions or that the UST system component installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation.

(iv) Every Category 2 and 3 UST system must be installed in accordance with the general requirements for tank installation in sections 760-1806.2(a).

(5) Dispenser systems. Each UST system must be equipped with under-dispenser containment for any dispenser system. Under-dispenser containment must be liquid-tight on its sides, on the bottom, and at any penetrations. Under-dispenser containment must allow for visual inspection and access to the components in the containment system and be continuously electronically monitored for leaks from the dispenser system.

(6) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 4-3.6 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 6.3.9 meets the requirements of this subparagraph.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the UST system in case of piping or dispenser hose failure. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 4.2.4 meets the requirements of this subparagraph.

(iii) Every fill pipe leading to a pump-filled UST must be equipped with a properly functioning check valve or equivalent device which provides automatic protection against backflow. A check valve is required only when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.

(iv) Each connection on a gravity-drained UST through which petroleum can normally flow must be equipped with an operating valve to control the flow. For a valve installed on or before October 11, 2015, a valve which meets the standards set forth in NFPA 30 (1984 edition), section 2-2.7.1 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30 (2012 edition), section 22.13.1 meets the requirements of this subparagraph.

(7) Tank sumps.

(i) Every Category 2 tank must be equipped with one or more watertight tank sumps attached to a manway or containment collar.

(ii) Every tank sump which acts as a secondary barrier for interstitial monitoring on a Category 2 UST which is not attached to a containment collar must be replaced by a Department approved technician with a tank sump attached to a containment collar when a substantial repair or modification is performed to a UST system which results in the excavation of the tank sump.

(iii) Every Category 3 tank must be equipped with watertight tank sumps attached to each containment collar on the tank.

(iv) Every tank sump must be accessible at grade. Manhole covers at grade must be liquid tight. The tank sump must be designed to shed any water that penetrates the manhole cover at grade. Manhole covers that are bolted in place must have liquid-tight insert covers for fill and vapor recovery connections.

(v) The top edge of the tank sump must be above the bottom of the manhole frame. The manhole frame may not be trimmed. There must be sufficient room between the opening in the top of the tank sump and the skirt of the manhole frame to allow water to drain. A minimum clearance of two inches must be maintained around the tank sump riser. This requires the diameter of the manhole frame to be a minimum of four inches greater than the diameter of the opening in the top of the tank sump.

(c) Equipment standards for Category 1 UST systems.

(1) Alternatives allowed. Every Category 1 UST system must comply with the following requirements:

(i) except for Group 1 and 2 tanks, UST systems must meet Category 2 UST system equipment standards under subdivision (b) of this section, with the exception of the requirements contained in section 760-1802.1(b)(4)(iii) of this Article.

(ii) Group 1 and 2 tank systems must comply with one of the following:

(a) Category 2 UST system equipment standards under subdivision (b) of this section, with the exception of the requirements contained in section 760-1802.1(b)(4)(iii) of this Article; or

(b) the requirements in paragraphs (2) through (5) of this subdivision if the UST is single-walled and was installed with Department approval and is a fiberglass-reinforced plastic (FRP) tank, clad tank, or tank jacketed with a non-corrodible material; or

(c) permanent closure requirements in section 760-1802.6(b) of this Article.

(2) The UST must be designed and constructed according to one of the following (refer to section 760-1801.10 of this Article for complete citation of references):

(i) Suffolk County Sanitary Code Article 12, effective January 1, 1980;

(ii) Suffolk County Sanitary Code Article 12, amended July 28, 1982;

(iii) Suffolk County Sanitary Code Article 12, amended August 29, 1984; or

(iv) Suffolk County Sanitary Code Article 12, amended April 9, 1986.

(3) Piping requirements.

(i) Piping installed on or before October 11, 2015 that routinely contains petroleum and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with the requirements of section 760-1802.1(b)(2)(i)(a) and (b) of this Article.

(ii) Piping installed after October 11, 2015 that routinely contains petroleum and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with section 760-1802.1(b)(2)(ii) of this Article.

(4) Spill and overfill prevention equipment. To prevent spilling and overfilling associated with petroleum transfer to the UST system, the facility must use the following spill and overfill prevention equipment:

(i) spill prevention equipment that will prevent release of petroleum when the transfer hose is detached from the fill pipe (for example, a spill catch basin); and

(ii) overfill prevention equipment that will:

(a) automatically shut off flow into the UST when the UST is no more than 95 percent full;

(b) alert the operator or carrier when the UST is no more than 90 percent full by restricting the flow into the UST or triggering a high-level alarm; or

(c) restrict flow 30 minutes prior to overfilling, alert the operator or carrier with a high-level alarm one minute before overfilling, or automatically

shut off flow into the UST so that none of the fittings located on top of the UST are exposed to product due to overfilling.

(5) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 4-3.6 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 6.3.9 meets the requirements of this subparagraph.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the UST system in case of piping or dispenser hose failure. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 meets the requirements of this subparagraph. For a valve installed after October11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 4.2.4 meets the requirements of this subparagraph.

(iii) Every fill pipe leading to a pump-filled UST must be equipped with a properly functioning check valve or equivalent device which provides automatic protection against backflow. A check valve is required only when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.

(iv) Each connection on a gravity-drained UST through which petroleum can normally flow must be equipped with an operating valve to control the flow. For a valve installed on or before October 11, 2015, a valve which meets the standards set forth in NFPA 30 (1984 edition), section 2-2.7.1 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30 (2012 edition), section 22.13.1 meets the requirements of this subparagraph.

§760-1802.2 General operating requirements.

(a) Spill and overfill prevention.

(1) Every facility must ensure that releases due to spilling or overfilling do not occur. One of the transfer procedures described in NFPA 385 (2012 edition) or API RP 1007 (March 2001 edition) must be used in order to comply with the requirement of this paragraph, unless those procedures are technically infeasible. In circumstances of technical infeasibility, the facility must develop and employ practices to ensure that releases due to spilling or overfilling do not occur.

(2) The facility must report, investigate, and clean up any spills and overfills in accordance with the Environmental Conservation Law, the Navigation Law, and 6 NYCRR section 613-2.4(d) as implemented by NYSDEC.

(3) Every UST system must have a label at the fill port specifying tank registration identification number, tank design and working capacities, and type of petroleum that is able to be stored in the UST system.

(4) Every UST system fill port must be color coded in accordance with API RP 1637. If a UST system contains petroleum that does not have a corresponding API color code, the facility must otherwise mark the fill port (for example, with stenciled letters) to identify the petroleum currently in the UST system. For any fill port connected to multiple UST systems storing different types of petroleum, the facility may place the marking near the fill port (for example, with a label or placard) to identify the types of petroleum in the UST systems.

(5) Where there are monitoring wells located at the facility, every monitoring well must be clearly identified as a monitoring well to prevent accidental delivery of petroleum to the well and must be sealed or capped so as to prevent liquid from entering the well from the surface.

(6) The facility must keep all gauges, valves, and other equipment for spill prevention in good working order.

(7) Delivery of petroleum to a UST system.

(i) Immediately prior to a delivery, the carrier must determine that the UST has available working capacity to receive the volume of petroleum to be delivered. Every aspect of the delivery must be monitored and immediate action must be taken to stop the flow of petroleum when the working capacity of the UST has been reached or should an equipment failure or emergency occur.

(ii) Immediately prior to a delivery, the carrier must inspect fill port catch basins to ensure that they are empty. If a catch basin contains water, petroleum, or debris, the carrier must ensure that it is emptied before a delivery is made.

(b) Operation and maintenance of corrosion protection. Every facility having a metal UST system with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented until the UST system is permanently closed or undergoes a change in service pursuant to section 760-1802.6(b) of this Article:

(1) All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the UST and piping that routinely contains petroleum and is in contact with the ground.

(2) All UST systems equipped with cathodic protection systems must be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(i) Frequency. All cathodic protection systems must be tested within six months of installation and at yearly intervals thereafter; and

(ii) Inspection criteria. One of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references) must be used to determine that cathodic protection is adequate:

(a) NACE TM0101-2012, 2012 edition;

(b) NACE TM0497-2012, 2012 edition;

(c) STI R051, January 2006;

(d) NACE SP0285-2011, 2011 edition; or

(e) NACE SP0169-2013, 2013 edition.

(3) UST systems with impressed current cathodic protection systems must be inspected every 60 days to ensure the equipment is operating properly.

(4) For UST systems using cathodic protection, records of the operation of the cathodic protection must be maintained to demonstrate compliance with the requirements of this section. The records generated to meet the provisions of paragraphs (2) and (3) of this subdivision must be kept for five years.

(c) Compatibility. Every facility must use a UST system made of or lined with materials that are compatible with the petroleum stored in the UST system.

(d) Repairs and modifications. Every facility must ensure that repairs will prevent releases due to structural failure or corrosion. The repairs must meet the following requirements:

(1) Any repair to a UST system must be properly conducted according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(i) NFPA 30, 2012 edition;

(ii) API RP 2200, September 2010;

(iii) API RP 1631, June 2001;

(iv) NFPA 326, 2010 edition;

(v) STI R972, December 2010;

(vi) NACE SP0285-2011, 2011 edition; or

(vii) FTPI RP T-95-02, January 1995.

(2) Every metal pipe section or fitting from which petroleum has been released as a result of corrosion or other damage must be replaced. Non-corrodible pipes and fittings must be repaired in accordance with the manufacturer's specifications.

(3) Repaired USTs and piping must be tightness tested in accordance with sections 760-1802.3(c)(3) and 760-1802.3(d)(2) of this Article, respectively, within 30 days following the date of the completion of the repair, unless one of the following conditions is met:

(i) the repaired UST is internally inspected in accordance with API RP 1631; or

(ii) the repaired portion of the UST system is monitored for releases in accordance with a method specified in sections 760-1802.3(b) of this Article.

(4) Within six months following the repair of any UST system that is cathodically protected, the cathodic protection system must be inspected in accordance with sections 760-1802.2(b)(2) and (3) of this Article to ensure that it is operating properly.

(5) Every facility must maintain records of each repair until the UST system is permanently closed or undergoes a change in service pursuant to section 760-1802.6(b) of this Article.

(6) Substantial repairs or modifications. Substantial repairs or modifications require prior approval of the Department. Substantial repairs or modifications must be scheduled such that a representative of the Department may witness the work during the Department's normal business hours. The Department must be given a minimum of three business days' notice to facilitate all required inspections. Backfilling may not occur until approved by the Department.

(e) Tank systems in locations subject to flooding.

(1) For Category 1 and 2 UST systems located in an area where the UST may become buoyant because of a rise in the water table, flooding, or accumulation of water, the facility must maintain safeguards in accordance with section 2-5.6 of NFPA 30 (1984 edition). If such safeguards include ballasting of a UST with water during flood warning periods, tank system valves and other openings must be closed and secured in a locked position in advance of the flood. Ballast water removed from the UST after the flood must not be discharged to the waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

(2) Every Category 3 UST system located in an area where the UST may become buoyant because of a rise in the water table, flooding, or accumulation of water must be protected by the use of anchoring or overburden.

(f) Dry secondary containment. With the exception of UST systems that utilize a liquid-filled space between the tank walls for leak detection purposes, a facility must maintain any secondary containment for UST systems in a dry condition.

(g) A Category 1 tank which is not double-walled and has leaked must be permanently closed in accordance with section 760-1802.6(b).

§760-1802.3 Leak detection.

(a) Leak detection requirements for all UST systems.

(1) Every facility must provide a method, or combination of methods, of leak detection that:

(i) can detect a leak from any portion of the UST and the piping that routinely contains petroleum;

(ii) is installed and calibrated in accordance with the manufacturer's instructions; and

(iii) meets the requirements of subdivisions (c) and (d) of this section, as applicable. In addition, the methods listed in sections 760-1802.3(c)(2), (4), (8), (9), (d)(1), and (2) of this Article must be capable of detecting the leak rate or quantity specified for that method in the corresponding section of the rule with a probability of detection of 95 percent and a probability of false alarm of 5 percent.

(2) When a leak detection method operated in accordance with the requirements of subdivisions (c) and (d) of this section indicates that a leak may have occurred, the facility must notify the NYSDEC in accordance with section 760-1802.4 of this Article.

(3) Additional testing and inspection. When a leak is suspected, or where inspections or tests required by this Article have not been performed, or where accurate inventory monitoring records are not kept and reconciled as required under section 760-1802.3(c)(1) of this Article, the Department may order the facility to inspect and to test the UST system or equipment for tightness. If the facility fails to conduct such inspections and tests within 10 days after receipt of the Department's or NYSDEC's order, the Department or NYSDEC may conduct inspections or tests for tightness. The expenses of conducting such tests as ordered by the Department or NYSDEC must be paid by the tank system owner.

(4) A facility that cannot implement a method of leak detection which complies with the requirements of this section must take the UST system out of service pursuant to section 760-1802.6(a) of this Article.

(b) Specific requirements for Category 1, 2, and 3 UST systems.

(1) Tanks. USTs must be monitored for leaks as follows:

(i) Every tank that is part of a Category 1 Group 1 or 2 UST system must be monitored for leaks as follows:

(a) for tanks without secondary containment, at weekly intervals using one of the methods listed in sections 760-1802.3(c)(2), (4) through (6), (8), and (9) of this Article. Continuous electronic monitoring satisfies the weekly monitoring requirement;

(b) for tanks with secondary containment, at weekly intervals in accordance with section 760-1802.3(c)(7) of this Article. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(i) Every tank that is part of a Category 2 UST system, Category 3 UST system or Category 1 UST system not subject to subparagraph (i) must be monitored for leaks at weekly intervals in accordance with section 760-1802.3(c)(7) of this Article. Continuous electronic monitoring satisfies the weekly monitoring requirement. Additionally, any UST system which stores any amount of motor fuel or kerosene that will be sold as part of a commercial transaction must meet the 10-day inventory monitoring requirements in section 760-1802.3(c)(1) of this Article.

(ii) All electronic tank monitoring systems must be inspected for operability at weekly intervals. A record of these inspections must be maintained in accordance with section 760-1802.3(e).

(2) Piping. Piping that routinely contains petroleum must be monitored for leaks as follows:

(i) Piping installed on or before December 27, 1986 must meet one of the following requirements:

(a) Pressurized piping. Piping that conveys petroleum under pressure must:

(1) be equipped with an automatic line leak detector that is operated in accordance with section 760-1802.3(d)(1) of this Article; and

(2) have an annual line tightness test conducted in accordance with section 760-1802.3(d)(2) of this Article or have monitoring conducted at weekly intervals in accordance with section 760-1802.3(d)(3) of this Article. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(b) Suction piping. Piping that conveys petroleum under suction must either have a line tightness test conducted at least every three years and in accordance with section 760-1802.3(d)(2) of this Article, or use a monitoring method conducted at weekly intervals in accordance with section 760-1802.3(d)(3) of this Article. Continuous electronic monitoring satisfies the weekly monitoring requirement. No leak detection is required for suction piping that is part of a Category 1 UST system that is shown by the facility to be designed and constructed to meet the following standards:

(1) the underground piping operates at less than atmospheric pressure;

(2) the underground piping is sloped so that the contents of the pipe will drain back into the UST if the suction is released;

(3) only one check valve is included in each suction line; and

(4) the check valve is located directly below and as close as practicable to the suction pump.

(ii) Piping installed after December 27, 1986 must meet one of the following requirements:

(a) Pressurized piping. Piping that conveys petroleum under pressure must be monitored for leaks at weekly intervals in accordance with section 760-1802.3(c)(7) of this Article and be equipped with an automatic line leak detector in accordance with section 760-1802.3(d)(1) of this Article. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(b) Suction piping. Piping that conveys petroleum under suction must be monitored for leaks at weekly intervals in accordance with section 760-1802.3(c)(7) of this Article. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(iii) All electronic piping monitoring systems must be inspected for operability at weekly intervals. A record of these inspections must be maintained in accordance with section 760-1802.3(e).

(c) Methods of leak detection for tanks. Each method of leak detection for USTs used to meet the requirements of section 760-1802.3(b)(1) of this Article must be conducted in accordance with the following:

(1) Inventory monitoring. Inventory monitoring must be conducted in the following manner:

(i) volume measurements for petroleum delivered, dispensed, and the amount still remaining in the UST (or each interconnected set of USTs), must be recorded each operating day;

(ii) the equipment used must be capable of measuring the level of petroleum over the full range of the tank's height to the nearest one-eighth of an inch;

(iii) the petroleum delivered must be reconciled with delivery receipts by measurement of the volume before and after delivery;

(iv) deliveries must be made through a drop tube that extends to within one foot of the tank bottom;

(v) petroleum dispensing must be metered and recorded within an accuracy of six cubic inches for every five gallons of petroleum withdrawn;

(vi) the measurement of any water level in the bottom of the UST must be made to the nearest one-eighth of an inch and recorded each operating day; and

(vii) on a daily basis, the facility must calculate the difference between the expected and actual amount of petroleum in the UST. At 10-day intervals, the facility must calculate the sum of the daily differences and compare it to the thresholds in clauses *(a)* and *(b)* of this subparagraph to determine if a leak is suspected. A leak is suspected when:

(a) the UST has a recurring accumulation of water within the ten-day period; or

(b) the sum of the daily differences over the 10-day interval exceeds the largest of three-quarters of one percent (0.0075) of:

(1) tank design capacity;

(2) total amount of petroleum delivered to the UST system; or

(3) total amount of petroleum dispensed from the UST system.

(2) Manual tank gauging. Manual tank gauging must meet the following requirements:

(i) tank petroleum level measurements are taken at the beginning and ending of a period, as set forth in subparagraph (iv) of this paragraph, during which no petroleum is added to or removed from the UST;

(ii) level measurements are based on an average of two consecutive stick readings at both the beginning and ending of the period;

(iii) the equipment used is capable of measuring the level of petroleum over the full range of the tank's height to the nearest one-eighth of an inch;

(iv) a leak is suspected and subject to the requirements of section 760-1802.4 of this Article if the variation between beginning and ending measurements exceeds the weekly or monthly standards in Table 1 of this subparagraph:

Table 1: Manual Tank Gauging

Design Capacity of UST	**Minimum Duration of Test**	**Weekly Standard (One Test)**	**Monthly Standard (Four-Test Average)**
550 gallons or less	36 hours	10 gallons	5 gallons
551-1,000 gallons (when tank diameter is 64")	44 hours	9 gallons	4 gallons
551-1,000 gallons (when tank diameter is 48")	58 hours	12 gallons	6 gallons

(v) USTs of 550 gallons or less design capacity and USTs with a design capacity of 551 to 1,000 gallons that meet the tank diameter criteria in Table 1 of this paragraph may use this as the sole method of release detection. USTs of greater than 1,000 gallons design capacity may not use this method to meet the requirements of this Subarticle.

(3) Tank tightness testing.

(i) Qualifications of test technicians. All tightness tests must be performed by a technician who has an understanding of variables which affect the test and is trained in the performance of the test. The technician must possess a Department-issued Tightness Tester's License, as outlined in the "Standards and Procedures for Licensing Companies and Individuals for tank and Line Leakage Detection Testing". The company performing the test must also have a Department-issued Tightness Testing Company License, as outlined in the "Standards and Procedures for Licensing Companies and Individuals for tank and Line Leakage Detection Testing". The referenced standard is available from the Department upon request.

(ii) Test reports.

(a) A copy of the test report must be provided by the facility to the Department within 30 days after performance of the test.

(b) All test reports must be in a form satisfactory to the Department and must include the following information:

(1) facility registration number;

(2) tank identification number used on the application form required in section 760-1801.9 of this Article for the UST and piping tested;

(3) date of test;

(4) results of test (passed; failed and leak rate);

(5) test method;

(6) certification by the technician that test complies with criteria for a tightness test in subparagraph (iii) of this paragraph;

(7) statement of technician's qualifications;

(8) address of technician;

(9) signature of technician;

(10) Department approved cover sheet; and

(11) all manually recorded and computer generated test data in a form acceptable to the Department.

(iii) Tank tightness testing (or another test of equivalent performance) must be capable of detecting a leak at the rate of 0.1 gallon per hour from any portion of the UST that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(4) Automatic tank gauging. Equipment for automatic tank gauging which tests for the loss of petroleum must meet the following requirements:

(i) the automatic petroleum level monitor test can detect a leak at the rate of 0.2 gallon per hour from any portion of the UST that routinely contains petroleum; and

(ii) the test must be performed with the system operating in one of the following modes:

(a) in-tank static testing conducted on a weekly basis; or

(b) continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the UST at weekly intervals.

(5) Vapor monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone must meet the following requirements:

(i) the materials used as backfill are sufficiently porous (for example, gravel, sand, crushed rock) to readily allow diffusion of vapors from leaks into the excavation area;

(ii) the stored petroleum, or a tracer compound placed in the UST system, is sufficiently volatile (for example, gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a leak from the UST;

(iii) the measurement of vapors by the monitoring device is not rendered inoperative by the groundwater, rainfall, or soil moisture or other known interferences so that a leak could go undetected for more than seven days;

(iv) the level of background contamination in the excavation zone will not interfere with the method used to detect leaks from the UST;

(v) the vapor monitors are designed and operated to detect any significant increase in concentration above background of the petroleum stored in the UST system, a component or components of that substance, or a tracer compound placed in the UST system;

(vi) in the UST excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs (i) through (iv) of this paragraph and to establish the number and positioning of monitoring wells that will detect leaks within the excavation zone from any portion of the UST that routinely contains petroleum; and

(vii) monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(6) Groundwater monitoring. Testing or monitoring for liquids on the groundwater must meet the following requirements:

(i) the petroleum stored is immiscible in water and has a specific gravity of less than one;

(ii) groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (for example, the soil should consist of gravels, coarse to medium sands, coarse silts, or other permeable materials);

(iii) the slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of petroleum on the water table into the well under both high and low groundwater conditions;

(iv) monitoring wells must be sealed from the ground surface to the top of the filter pack;

(v) monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;

(vi) the continuous electronic monitoring devices or manual methods used can detect the presence of at least one-eighth of an inch of free product on top of the groundwater in the monitoring wells;

(vii) within and immediately below the UST system excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs (i) through (v) of this paragraph and to establish the number and positioning of monitoring wells or devices that will detect leaks from any portion of the UST that routinely contains petroleum; and

(viii) monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(7) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used if the system is designed, constructed and installed to detect a leak from any portion of the UST that routinely contains petroleum; and if the system meets one of the requirements set forth in subparagraphs (i) through (iii) of this paragraph**:**

(i) for a double-walled UST system, the sampling or testing method can detect a leak through the inner wall in any portion of the UST that routinely contains petroleum;

(ii) for a UST system with a secondary barrier within the excavation zone, the sampling or testing method used can detect a leak between the UST system and the secondary barrier, and the following conditions are met:

(a) the secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (at least 1×10-6 cm/sec for the petroleum stored) to direct a leak to the monitoring point and permit its detection;

(b) the barrier is compatible with the petroleum stored so that a leak from the UST system will not cause a deterioration of the barrier allowing a leak to pass through undetected;

(c) for a cathodically protected tank, the secondary barrier must be installed so that it does not interfere with the proper operation of the cathodic protection system;

(d) the groundwater, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a leak could go undetected for more than seven days;

(e) the site is assessed to ensure that the secondary barrier is always above the groundwater and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions; and

(f) monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(iii) For a UST system using continuous vacuum, pressure, or liquid-filled methods of interstitial monitoring, the method must be capable of detecting a breach in both the inner and outer walls of the tank and/or piping.

(8) Statistical inventory reconciliation. Statistically based testing or monitoring methods must meet the following requirements:

(i) report a quantitative result with a calculated leak rate;

(ii) be capable of detecting a leak rate of 0.2 gallon per hour; and

(iii) use a threshold that does not exceed one-half the minimum detectible leak rate.

(9) Other methods.

(i) **Reserved** **********

(ii) The Department may approve another method if the owner and operator can demonstrate that the method can detect a leak as effectively as any of the methods allowed in paragraphs (4) through (8) of this subdivision.

(d) Methods of leak detection for piping. Each method of leak detection for piping used to meet the requirements of section 760-1802.3(b)(2) of this Article must be conducted in accordance with the following:

(1) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of petroleum through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within one hour. The facility must conduct a test of the operation of the leak detector at yearly intervals.

(2) Line tightness testing. A periodic test of piping may be conducted only if it can detect a leak at the rate of 0.1 gallon per hour at one and one-half times the operating pressure.

(3) Alternative leak detection methods for piping without secondary containment that is associated with a Category 1 Group 1 or 2 UST system. Any of the methods in sections 760-1802.3(c)(5) through (8) of this Article may be used if they are designed to detect a leak from any portion of the piping that routinely contains petroleum.

(e) Leak detection recordkeeping. All facilities must maintain records demonstrating compliance with all applicable requirements of this section. These records must meet the following requirements:

(1) the results or records of any sampling, testing, inspection, or monitoring must be maintained for at least five years;

(2) the results of tank and line tightness testing must be retained until the next test is conducted;

(3) a copy of the results of tank and line tightness testing must be submitted to the Department within 30 days after performance of the test(s); and

(4) written documentation of all calibration, maintenance, and repair of leak detection equipment permanently located on-site must be maintained for at least five years after the servicing work is completed. Any schedules of required calibration and maintenance provided by the leak detection equipment manufacturer must be retained for five years from the date of installation.

(f) Electronic monitoring probes. All probes used for leak detection must be installed such that they are accessible for inspection. Continuous electronic monitoring probes located in tank sumps or UDC's must be rigidly mounted.

§760-1802.4 Reporting, investigation, and confirmation.

A facility must act in accordance with the provisions of the Environmental Conservation Law, the Navigation Law, and 6 NYCRR § 613-2.4 as implemented by NYSDEC with respect to any suspected or known spill. The citations to 6 NYCRR §§ 613-2.3(c)(1) and (8), and 613-2.3(a) and (b), found in 6 NYCRR § 613-2.4(a)(1)(iii), must be read as citations to §§ 760-1802.3(c)(1), and 760-1802.3(a) and (b) of this Article, respectively.

§760-1802.5 Operator training.

Every facility that is covered by § 760-1802.1(a) of this Article must comply with the operator training requirements of 6 NYCRR § 613-2.5 as implemented by NYSDEC.

§760-1802.6 Out-of-service UST systems and closure.

(a) Out-of-service UST systems.

(1) (i) When a UST system is out-of-service, the facility must continue operation and maintenance of corrosion protection in accordance with section 760-1802.2(b) of this Article, and any leak detection in accordance with sections 760-1802.3(a) and (b) of this Article. The facility must comply with the requirements of 6 NYCRR Subpart 613-6 as implemented by NYSDEC if a release is confirmed.

(ii) Leak detection required under sections 760-1802.3(a) and (b) of this Article is not required as long as the UST system has been emptied in accordance with subdivision (f) of this section and the fill port has been locked. The facility must give written notice to the Department a minimum of three business days prior to the facility stopping inspections and leak detection. However, leak detection required under sections 760-1802.3(a) and (b) of this Article must resume upon resumption of delivery of petroleum into the UST system.

(2) When a UST system is out-of-service for a period of 3 to 12 months, the facility must also comply with the following requirements:

(i) leave vent lines open and functioning; and

(ii) cap and secure all other piping, ancillary equipment and manways.

(3) When a UST system is out-of-service for more than 12 months, the facility must permanently close the UST system in accordance with subdivisions (b) through (e) of this section.

(b) Permanent closure and changes in service.

(1) At least 30 days before beginning permanent closure or a change in service, a facility must notify the Department of its intent to permanently close or make the change in service, unless such action is in response to corrective action. The required assessment of the excavation zone under subdivision (c) of this section must be performed after notifying the Department but before completion of the permanent closure or a change in service. The resultant report must be submitted to the Department within 90 days after permanent closure. The permanent closure or change in service must be scheduled such that a representative of the Department may witness the procedure during the Department's normal business hours. The Department must be given a minimum of three business days' notice to facilitate all required inspections. Within 30 days after permanent closure or a change in service, a facility must submit a registration application to the Department, in accordance with section 760-1801.9 of this

Article, indicating that the UST system has been permanently closed or that a change in service has occurred.

(2) To permanently close a UST system:

(i) The facility must empty the UST in accordance with subdivision (f) of this section. Every tank that is part of a UST system that is permanently closed must also be either removed from the ground or filled with sand or concrete slurry. Filling with sand or concrete slurry may only be done with permission from the Department where extraordinary circumstances exist such as when complete removal is unreasonable because the tank is located beneath a building foundation. If sand or concrete slurry is used, all voids within the UST must be filled. All connecting and fill lines must be disconnected and removed or securely capped or plugged. Manways must be securely fastened in place.

(ii) The facility must ensure that all scheduled deliveries to the UST system are terminated.

(3) Use of a UST system to store a substance other than petroleum is considered a change in service. Before a change in service, the facility must empty and clean the UST by removing all liquid and accumulated sludge and conduct a site assessment in accordance with subdivision (c) of this section.

(4) One of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references) must be adhered to in order to comply with this subdivision:

(i) API RP 1604, March 1996;

(ii) API RP 2016, August 2001;

(iii) API RP 1631, June 2001; or

(iv) NFPA 326, 2010 edition.

(c) Assessing the site at closure or change in service.

(1) Before permanent closure or a change in service is completed, the facility must measure for the presence of a release where contamination is most likely to be present at the UST system location. In selecting sample types, sample locations, and measurement methods, the facility must consider the method of closure, the petroleum stored, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence of a release.

(2) If contaminated soils, contaminated groundwater, or petroleum as a liquid or vapor is discovered, the facility must begin corrective action in accordance with Subpart 6 of 6 NYCRR Part 613.

(d) For any UST system that has been out-of-service since December 27, 1986 and was not properly permanently closed pursuant to Department regulations governing UST system closure, the facility owner must assess the excavation zone and permanently close the UST system in accordance

with this section if the Department determines there is a potential for a release of petroleum from the UST system.

(e) Records for permanent closure or change in service. The facility must maintain for five years records that are capable of demonstrating compliance with closure requirements under this Subarticle. In addition, the facility must transmit a copy of the records to the Department within 30 days after permanent closure or change in service.

(f) The UST system is considered empty only after the UST system has been completely emptied of all liquid and cleaned of all residues, vented until dry and safe and secure. In emptying a UST system, the facility must assure that:

(1) Wash water is not discharged to the lands or waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

(2) Sludge accumulation on the bottom of the UST is removed, transported, and disposed of in a manner consistent with all State and Federal requirements for solid waste disposal.

Subarticle 760-1803 UST Systems Subject Only to Title 10

§760-1803.1 UST systems: design, construction, and installation.

(a) Applicability. The provisions of this Subarticle apply to every UST system that is part of a facility, where the UST system:

(1) contains heating oil used for on-premises consumption;

(2) has a storage capacity of 1,100 gallons or less and is used to store motor fuel for non-commercial purposes (not for resale) at a farm or residence;

(3) is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50; or

(4) consists of a field-constructed tank.

(b) Equipment standards for Category 2 and 3 UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills, any facility containing a Category 2 or 3 UST system must meet the following requirements.

(1) Tanks. Each UST must be properly designed and constructed, and any portion underground that routinely contains petroleum must be protected from corrosion, as specified in subparagraphs (i) through (iii) of this paragraph. In addition, all USTs must be secondarily contained in accordance with subparagraph (iv) of this paragraph:

(i) Every UST made of fiberglass-reinforced plastic (FRP) must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(a) for Category 2 USTs:

(1) UL 1316, July 1983; or

(2) CAN4-S615-M83, 1983;

(b) for Category 3 USTs:

(1) UL 1316, January 1994; or

(2) ULC-S615-98, 1998.

(ii) Every UST made of steel that is cathodically protected must meet the following conditions:

(a) the UST must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) for Category 2 USTs:

(i) UL 58, April 1981; or

(ii) ULC-S603-M1981, 1981;

(2) for Category 3 USTs:

(i) UL 58, December 1996; or

(ii) ULC-S603-00, 2000;

(b) the UST must be cathodically protected in the following manner:

(1) the UST must be coated with a suitable dielectric material;

(2) the cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(i) for Category 2 USTs:

(A) API RP 1632, January 1983;

(B) ULC-S603.1-M1982, 1982; or

(C) sti-P3®, July 1983;

(ii) for Category 3 USTs:

(A) sti-P3®, September 2013;

(B) UL 1746, January 2007;

(C) ULC-S603.1-11, 2011; or

(D) NACE SP0285-2011, 2011;

(3) every field-installed cathodic protection system must be designed by a corrosion expert; and

(4) every impressed current system must be designed to allow determination of current operating status as required in section 760-1803.2(b)(3) of this Article.

(iii) Every UST made of steel that is clad or jacketed with a non-corrodible material must meet the following conditions:

(a) the UST must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) for Category 2 USTs:

(i) UL 58, April 1981; or

(ii) ULC-S603-M1981, 1981;

(2) for Category 3 USTs:

(i) UL 58, December 1996; or

(ii) ULC-S603-00, 2000;

(b) the tank in a Category 2 UST system must be clad with a non-corrodible material in accordance with the following requirements:

(1) the UST must be electrically insulated from the piping with dielectric fittings, bushings, washers, sleeves or gaskets which are compatible with petroleum, petroleum additives, and corrosive soils;

(2) the UST must have an exterior fiberglass reinforced plastic shell bonded firmly to the steel. This must consist of a base coat of resin five to eight mils (0.005 to 0.008 inch) in thickness overlain by two layers of resin with fiberglass reinforcement with a thickness of at least 85 mils (0.085 inch) after rolling. A final coat of resin must be applied to a thickness of 10 to 15 mils (0.01 to 0.015 inch). The thickness of the completed coating must be a minimum of 100 mils (0.1 inch) after curing. The coating's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the coating and a permanent bond between coating and steel is maintained. The coating must be of sufficient density and strength to form a hard impermeable shell which will not crack, wick, wear, soften, or separate and which must be capable of containing the product under normal service conditions in the event the steel wall is perforated. The coating must be non-corrodible under adverse underground electrolytic conditions and must be compatible with petroleum products and petroleum additives;

(3) the coating must be factory-inspected for air pockets, cracks, blisters, pinholes, and electrically tested at 10,000 volts for coating short circuits or coating faults. Any defects must be repaired. The coating must be factory checked with a Barcol Hardness Tester or equivalent to assure compliance with the manufacturer's minimum specified hardness standard for cured resin;

(c) the tank in a Category 3 UST system must be jacketed with a non-corrodible material which is designed, fabricated, and installed according to one of the following codes of practice (refer to section 760-1801.10 of this Part for complete citation of references):

(1) UL 1746, January 2007; or

(2) STI F922, January 2013.

(iv) Every UST must be secondarily contained according to the following:

(a) the secondarily contained UST must:

(1) be able to contain petroleum leaked from the primary containment until it is detected and removed; and

(2) be able to prevent the release of petroleum;

(b) the tank in a Category 2 UST system must have a secondary containment system which must consist of one of the following:

(1) double-walled USTs. A double-walled UST which is designed and manufactured in accordance with all of the following standards:

(i) the interstitial space of the double-walled UST can be monitored for tightness;

(ii) outer jackets made of steel must have a minimum thickness of 10-gauge and must be coated as prescribed in section 760-1803.1(b)(1)(ii)*(b)(1)* or section 760-1803.1(b)(1)(iii)*(b)(2)* of this Article;

(iii) there are no penetrations of any kind through the jacket to the UST except top entry manways and fittings required for filling the tank, venting the tank, or monitoring the interstitial space;

(iv) the outer jacket must cover 100 percent of the UST except for penetrations referenced in item *(iii)* of this subclause; and

(v) the jacket must be designed to contain an inert gas or liquid at a pressure greater than the maximum internal pressure or be able to contain a vacuum for a period of one month;

(2) vaults. If a vault is used for secondary containment, the vault must be water tight, impervious to leakage of petroleum and able to withstand chemical deterioration and structural stresses from internal and external causes. The vault must be a continuous structure with a chemical-resistant water stop used at any joint. There must be no drain connections or other entries through the vault except there may be top entry manholes and other top openings for filling and emptying

the UST, for venting, and for monitoring and pumping of petroleum which may leak into the vault;

(c) the tank in a Category 3 UST system must be double-walled and must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) UL 58, December 1996;

(2) UL 1316, January 1994;

(3) UL 1746, January 2007;

(4) STI F841, January 2006; or

(5) STI F922, January 2013.

(v) Containment collars. A UST must have a containment collar surrounding every tank penetration as follows:

(a) when excavation around a Category 2 UST exposes a tank manway or fitting that is not contained within a containment collar , a containment collar must be installed on the UST surrounding the exposed manway or fitting.

(b) for every Category 3 UST:

(1) Every single compartment UST must have at least two containment collars where tank fabrication permits.

(2) For multi-compartment USTs, each compartment must have at least two containment collars where tank fabrication permits.

(vi) Tank Manways. Every single compartment UST must have at least one top entry manway where tank fabrication permits. For multi-compartment USTs, each compartment must have at least one top entry manway where tank fabrication permits.

(2) Piping.

(i) Corrosion protection. Piping that routinely contains petroleum and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with clauses (*a*) or (*b*) of this subparagraph, below.

(a) Piping made of a non-corrodible material must meet the following conditions.

(1) The materials, joints, and joint adhesives must be compatible with petroleum, petroleum additives, and corrosive soils.

(2) All underground piping must be designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(3) All joints must be liquid and air tight.

(4) All underground piping must be tested for tightness before being covered, enclosed or placed in use. The test must be scheduled such that a representative of the Department may witness the test during the Department's normal business hours. The Department must be given a minimum of three business days' notice prior to the scheduled test.

(5) All piping that is installed after October 11, 2015 must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(i) UL 971, February 2006; or

(ii) ULC-S660-08, 2008.

(b) Piping made of steel that is cathodically protected must meet the following conditions.

(1) The cathodic protection system must provide a minimum of 30 years of protection in corrosive soils.

(2) Cathodic protection must be provided by the use of sacrificial anodes or impressed current.

(3) Where sacrificial anodes or impressed current systems are used, monitors to check on the adequacy of the system must be installed and kept in proper working condition. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the system must be repaired or the piping will be considered unprotected and must be tested for tightness in accordance with section 760-1803.3(d)(2) of this Article.

(4) Except where cathodic protection is provided by impressed current, underground piping must have dielectric bushings, washers, sleeves, or gaskets installed at the end to electrically isolate the piping from the UST and the dispenser. These dielectric connectors must be compatible with petroleum, petroleum additives, and corrosive soils.

(5) All underground piping must be designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(6) All joints must be liquid and air tight.

(7) All underground piping must be tested for tightness in accordance with section 760-1803.3(d)(2) of this Article before being covered, enclosed, or placed in use. The test must be scheduled such that a representative of the Department may witness the test during the Department's normal business hours. The Department must be given a minimum of three business days' notice prior to the scheduled test.

(8) All piping that is installed after October 11, 2015 must meet the following conditions:

(i) the piping is designed and constructed according to UL 971A, October 2006 (refer to section 760-1801.10 of this Article for complete citation of references);

(ii) the piping is coated with a suitable dielectric material;

(iii) the cathodic protection system is designed, fabricated, and installed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(A) API RP 1632, January 1996 (revised 2002);

(B) STI R892, January 2006;

(C) NACE SP0169-2013, 2013; or

(D) NACE SP0285-2011, 2011;

(iv) any field-installed cathodic protection system is designed by a corrosion expert; and

(v) any impressed current system is designed to allow determination of current operating status as required in section 760-1803.2(b)(2) of this Article.

(ii) Secondary containment. All piping must be secondarily contained and meet the following conditions:

(a) be able to contain petroleum leaked from the primary containment until it is detected and removed; and

(b) be able to prevent the release of petroleum.

(iii) Every section of piping outside a building which is not in contact with the ground and every section of piping within a building that is not readily visible must be

secondarily contained in accordance with section 760-1802.1(b)(2)(ii)*(c)* and must be constructed in accordance with one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(a) piping installed on or before October 11, 2015: NFPA 30 (1984 edition); or

(b) piping installed after October 11, 2015: NFPA 30 (2012 edition).

(3) Spill and overfill prevention equipment. To prevent spilling and overfilling associated with petroleum transfer to the UST system, the facility must use the spill and overfill prevention equipment as follows:

(i) spill prevention equipment that will prevent release of petroleum when the transfer hose is detached from the fill pipe. Such equipment must include a secondarily contained spill bucket. The minimum volume of the spill bucket must be:

(a) 15 gallons; or

(b) five gallons so long as the spill bucket is within a liquid-tight sump with leak detection and there is a minimum one inch gap between the top of the spill bucket and the bottom of the manhole cover;

(ii) Overfill prevention equipment must be used that will:

(a) automatically shut off flow into the UST when the UST is no more than 95 percent full; or

(b) alert the operator or carrier when the UST is no more than 90 percent full by triggering a Department approved high-level alarm.

(4) Installation.

(i) Every Category 2 UST system must be installed in accordance with section 760-1801.9(j) of this Article and the manufacturer's instructions. This includes repair of any damage to the UST coatings prior to backfilling.

(ii) Every Category 3 UST system must be properly installed according to section 760-1801.9(j) of this Article and the manufacturer's instructions. This includes repair of any damage to the tank coatings prior to backfilling.

(iii) As-built information records. The facility must maintain an accurate diagram for the life of every Category 2 or 3 UST system:

(a) showing the location of:

(1) each UST and its associated piping, including registration identification number;

(2) fill ports;

(3) dispensing equipment;

(4) check valves;

(5) transition sumps (if any); and

(6) monitoring or recovery wells (if any);

(b) listing the following tank system attributes for Category 3 UST systems:

(1) physical dimensions of each UST; and

(2) installation date for each portion of piping installed after October 11, 2015;

(c) indicating at least one visible reference point (for example, facility structure), a frame of reference (for example, north arrow), and scale of the drawing.

(iv) Every Category 2 and 3 UST system must be installed in accordance with the general requirements for tank installation in sections 760-1806.2(a).

(5) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 4-3.6 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 6.3.9 meets the requirements of this subparagraph.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the UST system in case of piping or dispenser hose failure. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 meets this requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 4.2.4 meets the requirements of this subparagraph.

(iii) Every fill pipe leading to a pump-filled UST must be equipped with a properly functioning check valve or equivalent device which provides automatic protection against backflow. A check valve is required only when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.

(iv) Each connection on a gravity-drained UST through which petroleum can normally flow must be equipped with an operating valve to control the flow. For a valve installed on or before October 11, 2015, a valve which meets the standards set forth in NFPA 30 (1984 edition), section 2-2.7.1 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30 (2012 edition), section 22.13.1 meets the requirements of this subparagraph.

(6) Dispenser systems.

(i) All dispensers must be equipped with under-dispenser containment.

(ii) Under-dispenser containment must be liquid-tight on its sides, on the bottom, and at all penetrations. Under-dispenser containment must allow for visual inspection and access to the components in the containment system and be continuously electronically monitored for leaks from the dispenser system.

(7) Tank sumps.

(i) Every Category 2 tank must be equipped with one or more watertight tank sumps attached to a manway or a containment collar.

(ii) Every tank sump which acts as a secondary barrier for interstitial monitoring on a Category 2 UST which is not attached to a containment collar must be replaced by a Department approved technician with a tank sump attached to a containment collar when a substantial repair or modification is performed to a UST system which results in the excavation of the tank sump.

(iii) Every Category 3 tank must be equipped with watertight tank sumps attached to each containment collar on the tank.

(iv) Every tank sump must be accessible at grade. Manhole covers at grade must be liquid tight. The tank sump must be designed to shed any water that penetrates the manhole cover at grade. Manhole covers that are bolted in place must have liquid-tight insert covers for fill and vapor recovery connections.

(v) The top edge of the tank sump must be above the bottom of the manhole frame. The manhole frame may not be trimmed. There must be sufficient room between the opening in the top of the tank sump and the skirt of the manhole frame to allow water to drain. A minimum clearance of two inches must be maintained around the tank sump riser. This requires the diameter of the manhole frame to be a minimum of four inches greater than the diameter of the opening in the top of the tank sump.

(c) Equipment standards for Category 1 UST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills, any facility containing a Category 1 UST system must meet the following requirements.

(1) Piping requirements. Piping installed on or after December 27, 1986 that routinely contains petroleum and is in contact with the ground must meet the requirements of section 760-1803.1(b)(2) of this section.

(2) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 4-3.6 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 6.3.9 meets the requirements of this subparagraph.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the UST system in case of piping or dispenser hose failure. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 meets this requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 4.2.4 meets the requirements of this subparagraph.

(iii) Every fill pipe leading to a pump-filled UST must be equipped with a properly functioning check valve or equivalent device which provides automatic protection against backflow. A check valve is required only when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.

(iv) Each connection on a gravity-drained UST through which petroleum can normally flow must be equipped with an operating valve to control the flow. For a valve installed on or before October 11, 2015, a valve which meets the standards set forth in NFPA 30 (1984 edition), section 2-2.7.1 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30 (2012 edition), section 22.13.1 meets the requirements of this subparagraph.

(3) Dispenser systems.

(i) All dispensers must be equipped with under-dispenser containment.

(ii) Under-dispenser containment must be liquid-tight on its sides, on the bottom, and at any penetrations. Under-dispenser containment must allow for visual inspection and access to the components in the containment system and be continuously electronically monitored for leaks from the dispenser system.

§760-1803.2 General operating requirements.

(a) Spill and overfill prevention.

(1) Every facility must ensure that releases due to spilling or overfilling do not occur. One of the transfer procedures described in NFPA 385 (2012 edition) or API RP 1007 (March 2001 edition) must be used in order to comply with the requirement of this paragraph, unless

those procedures are technically infeasible. In circumstances of technical infeasibility, the facility must develop and employ practices to ensure that releases due to spilling or overfilling do not occur.

(2) The facility must report, investigate, and clean up any spills and overfills in accordance with section 760-1803.4 of this Article.

(3) Every Category 2 or 3 UST system must have a label at the fill port specifying tank registration identification number, tank design and working capacities, and type of petroleum that is able to be stored in the UST system.

(4) Every UST system fill port must be color coded in accordance with API RP 1637. If a UST system contains petroleum that does not have a corresponding API color code, the facility must otherwise mark the fill port (for example, with stenciled letters) to identify the petroleum currently in the UST system. For any fill port connected to multiple UST systems storing different types of petroleum, the facility may place the marking near the fill port (for example, with a label or placard) to identify the types of petroleum in the UST systems.

(5) Where there are monitoring wells located at a facility, every monitoring well must be clearly identified as a monitoring well to prevent accidental delivery of petroleum to the monitoring well and must be sealed or capped so as to prevent liquid from entering the well from the surface.

(6) The facility must keep all gauges, valves, and other equipment for spill prevention in good working order.

(7) Immediately prior to a delivery, the carrier must determine that the UST has available working capacity to receive the volume of petroleum to be delivered. Every aspect of the delivery must be monitored and immediate action must be taken to stop the flow of petroleum when the working capacity of the UST has been reached or should an equipment failure or emergency occur.

(b) Operation and maintenance of corrosion protection. Every facility having a metal UST system with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented until the UST system is permanently closed pursuant to section 760-1803.5(b) of this Article:

(1) All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the UST and piping that routinely contains petroleum and is in contact with the ground.

(2) All UST systems equipped with cathodic protection systems must be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(i) frequency. All cathodic protection systems must be tested at yearly intervals; and

(ii) inspection criteria. All cathodic protection systems must provide adequate electrical current to prevent corrosion.

(3) For UST systems using cathodic protection, records of the operation of the cathodic protection must be maintained to demonstrate compliance with the requirements of this section. The records generated to meet the provisions of paragraph (2) of this subdivision must be kept for five years.

(c) Compatibility. Every facility must use a UST system made of or lined with materials that are compatible with the petroleum stored in the UST system.

(d) Repairs and modifications. Every facility must ensure that repairs will prevent releases due to structural failure or corrosion. The repairs must meet the following requirements:

(1) Any repair to a UST system must be properly conducted according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(i) NFPA 30, 2012 edition;

(ii) API RP 2200, September 2010;

(iii) API RP 1631, June 2001;

(iv) NFPA 326, 2010 edition;

(v) STI R972, December 2010;

(vi) NACE SP0285-2011, 2011 edition; or

(vii) FTPI RP T-95-02, January 1995.

(2) Every metal pipe section or fitting from which petroleum has been released as a result of corrosion or other damage must be replaced. Non-corrodible pipes and fittings must be repaired in accordance with the manufacturer's specifications.

(3) Repaired USTs and piping must be tightness tested in accordance with sections 760-1803.3(c)(1) and 760-1803.3(d)(2) of this Article, respectively, within 30 days following the date of the completion of the repair, unless one of the following conditions is met:

(i) the repaired UST is internally inspected in accordance with API RP 1631; or

(ii) the repaired portion of the UST system is monitored for releases in accordance with sections 760-1803.3(b) of this Article .

(4) Within six months following the repair of any UST system that is cathodically protected, the cathodic protection system must be inspected in accordance with sections 760-1803.2(b)(2) of this Article to ensure that it is operating properly.

(5) Every facility must maintain records of each repair until the UST system is permanently closed pursuant to section 760-1803.5(b) of this Article.

(6) Substantial repairs or modifications. Substantial repairs or modifications require prior approval of the Department. A Permit to Construct may be required. Substantial repairs or

modifications must be scheduled such that a representative of the Department may witness the work during the Department's normal business hours. The Department must be given a minimum of three business days' notice to facilitate all required inspections. Backfilling may not occur without prior approval from the Department.

(e) Tank systems in locations subject to flooding.

(1) For Category 1 and 2 UST systems located in an area where the UST may become buoyant because of a rise in the water table, flooding, or accumulation of water, the facility must maintain safeguards in accordance with sections 2-5.6 of NFPA 30 (1984 edition). If such safeguards include ballasting of a UST with water during flood warning periods, tank system valves and other openings must be closed and secured in a locked position in advance of the flood. Ballast water removed from the UST after the flood must not be discharged to the waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

(2) Every Category 3 UST system located in an area where the UST may become buoyant because of a rise in the water table, flooding, or accumulation of water must be protected by the use of anchoring or overburden.

(f) Dry secondary containment. With the exception of UST systems that utilize a liquid-filled space between the tank walls for leak detection purposes, facilities must maintain any secondary containment for UST systems in a dry condition.

(g) A Category 1 tank which has leaked must be permanently closed in accordance with section 760-1803.5(b).

§760-1803.3 Leak detection.

(a) Leak detection requirements for all UST systems.

(1) Every facility must provide a method, or combination of methods, of leak detection that:

(i) can detect a leak from any portion of the UST and the piping that routinely contains petroleum;

(ii) is installed and calibrated in accordance with the manufacturer's instructions; and

(iii) meets the requirements in subdivisions (c) and (d) of this section, as applicable.

(2) When a leak detection method operated in accordance with the requirements of subdivisions (c) and (d) of this section indicates that a leak may have occurred, the facility must notify the NYSDEC in accordance with section 760-1803.4(a) of this Article.

(3) Additional testing and inspection. When a leak is suspected, or where inspections or tests required by this Article have not been performed, the Department may order the facility to

inspect and to test the UST system or equipment for tightness and structural soundness. If the facility fails to conduct such inspections and tests within 10 days after receipt of the Department's order, the Department may conduct inspections or tests for tightness. The expenses of conducting such tests as ordered by the Department must be paid by the tank system owner.

(4) A facility that cannot implement a method of leak detection that complies with the requirements of this section must take the UST system out of service pursuant to section 760-1803.5(a) of this Article.

(b) Specific requirements for Category 1, 2, and 3 UST systems.

(1) Tanks. USTs must be monitored for leaks as follows:

(i) Any tank that is part of a Category 1 Group 1 or 2 UST system that has one or more leak detection systems described in sections 760-1803.3(c)(2) through (5) of this Article, must monitor for leaks at weekly intervals.

(ii) Except for any UST system storing No. 5 or No. 6 fuel oil, any tank that is part of a Category 1 Group 1 or 2 UST system that does not have a leak detection system described in sections 760-1803.3(c)(2) through (5) of this Article, must be tested for tightness in accordance with section 760-1803.3(c)(1) of this Article at yearly intervals.

(iii) Every UST, other than any Category 1 Group 1 or 2 UST, must be monitored for leaks in accordance with section 760-1803.3(c)(5) of this Article.

(iv) All electronic tank monitoring systems must be inspected for operability at weekly intervals. A record of these inspections must be maintained in accordance with section 760-1803.3(e).

(2) Piping. Piping that routinely contains petroleum and is in contact with the ground must be monitored for leaks as follows:

(i) Pressurized piping.

(a) Piping installed before December 27, 1986 that conveys petroleum under pressure must be tested for tightness in accordance with section 760-1803.3(d)(2) of this Article at yearly intervals, with the exception of the following:

(1) piping associated with any UST system storing No. 5 or No. 6 fuel oil;

(2) any pressurized piping that is equipped with an automatic line leak detector that is operated in accordance with section 760-1803.3(d)(1) of this Article.

(b) Piping installed on or after December 27, 1986 that conveys petroleum under pressure and is part of a UST system storing motor fuel must

be equipped with an automatic line leak detector that is operated in accordance with section 760-1803.3(d)(1) of this Article.

(ii) Suction piping. Piping installed before December 27, 1986 that conveys petroleum under suction must be tested for tightness in accordance with section 760-1803.3(d)(2) of this Article at yearly intervals, with the exception of piping associated with any UST system storing No. 5 or No. 6 fuel oil.

(iii) All electronic piping monitoring systems must be inspected for operability at weekly intervals. A record of these inspections must be maintained in accordance with section 760-1803.3(e).

(c) Methods of leak detection for tanks. Each method of leak detection for USTs used to meet the requirements of section 760-1803.3(b)(1) of this Article must be conducted in accordance with the following:

(1) Periodic tightness testing.

(i) Qualifications of test technicians. All tightness tests must be performed by a technician who has an understanding of variables which affect the test and is trained in the performance of the test. The technicians must possess a Department-issued Tightness Tester's License, as outlined in the "Standards and Procedures for Licensing Companies and Individuals for tank and Line Leakage Detection Testing", for the test being performed. The company performing the test must also have a Department-issued Tightness Testing Company License, as outlined in the "Standards and Procedures for Licensing Companies and Individuals for tank and Line Leakage Detection Testing", for the test being performed. The referenced standard is available from the Department upon request.

(ii) Test reports.

(a) A copy of the test report must be provided by the facility to the Department within 30 days after performance of the test.

(b) All test reports must be in a form satisfactory to the Department and must include the following information:

(1) facility registration number;

(2) tank identification number used on the application form required in section 760-1801.9 of this Article for the UST and piping tested;

(3) date of test;

(4) results of test (passed; failed and leak rate);

(5) test method;

(6) certification by the technician that test complies with criteria for a tightness test in subparagraph (iii) of this paragraph;

(7) statement of technician's qualifications;

(8) address of technician;

(9) signature of technician;

(10) Department approved cover sheet; and

(11) all manually recorded and computer generated test data in a form acceptable to the Department.

(iii) Tank tightness testing must be capable of detecting a leak at the rate of 0.1 gallon per hour from any portion of the UST that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(2) Automatic tank gauging. Equipment for automatic tank gauging which tests for the loss of petroleum must meet the following requirements:

(i) The automatic petroleum level monitor test can detect a leak at the rate of 0.2 gallon per hour from any portion of the UST that routinely contains petroleum; and

(ii) The test must be performed with the system operating in one of the following modes:

(a) In-tank static testing conducted on a weekly basis; or

(b) Continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the UST at weekly intervals.

(3) Vapor monitoring. Testing or monitoring for vapors within the soil gas of the excavation zone must meet the following requirements:

(i) the materials used as backfill are sufficiently porous (for example, gravel, sand, crushed rock) to readily allow diffusion of vapors from leaks into the excavation area;

(ii) the stored petroleum, or a tracer compound placed in the UST system, is sufficiently volatile (for example, gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation zone in the event of a leak from the UST;

(iii) the measurement of vapors by the monitoring device is not rendered inoperative by the groundwater, rainfall, or soil moisture or other known interferences so that a leak could go undetected for more than seven days;

(iv) the level of background contamination in the excavation zone will not interfere with the method used to detect leaks from the UST;

(v) the vapor monitors are designed and operated to detect any significant increase in concentration above background of the petroleum stored in the UST system, a component or components of that substance, or a tracer compound placed in the UST system;

(vi) in the UST excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs (i) through (iv) of this paragraph and to establish the number and positioning of monitoring wells that will detect leaks within the excavation zone from any portion of the UST that routinely contains petroleum; and

(vii) monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(4) Groundwater monitoring. Testing or monitoring for liquids on the groundwater must meet the following requirements:

(i) the petroleum stored is immiscible in water and has a specific gravity of less than one;

(ii) groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (for example, the soil should consist of gravels, coarse to medium sands, coarse silts, or other permeable materials);

(iii) the slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of petroleum on the water table into the well under both high and low groundwater conditions;

(iv) monitoring wells must be sealed from the ground surface to the top of the filter pack;

(v) monitoring wells or devices intercept the excavation zone or are as close to it as is technically feasible;

(vi) the continuous electronic monitoring devices or manual methods used can detect the presence of at least one-eighth of an inch of free product on top of the groundwater in the monitoring wells;

(vii) within and immediately below the UST system excavation zone, the site is assessed to ensure compliance with the requirements in subparagraphs (i) through (v) of this paragraph and to establish the number and positioning of monitoring wells or devices that will detect leaks from any portion of the UST that routinely contains petroleum; and

(viii) monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(5) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used if the system is designed, constructed, and installed to detect a leak from any portion of the UST that routinely contains petroleum; and if the system meets one of the requirements set forth in subparagraphs (i) through (iii) of this paragraph**:**

(i) for a double-walled UST system, the sampling or testing method can detect a leak through the inner wall in any portion of the UST that routinely contains petroleum;

(ii) for a UST system with a secondary barrier within the excavation zone, the sampling or testing method used can detect a leak between the UST system and the secondary barrier, and the following conditions are met;

(a) the secondary barrier around or beneath the UST system consists of artificially constructed material that is sufficiently thick and impermeable (at least 1×10-6 cm/sec with respect to water) to direct a leak to the monitoring point and permit its detection;

(b) the barrier is compatible with the petroleum stored so that a leak from the UST system will not cause a deterioration of the barrier allowing a leak to pass through undetected;

(c) for a cathodically protected tank, the secondary barrier must be installed so that it does not interfere with the proper operation of the cathodic protection system;

(d) the groundwater, soil moisture, or rainfall will not render the testing or sampling method used inoperative so that a leak could go undetected for more than seven days;

(e) the site is assessed to ensure that the secondary barrier is always above the groundwater and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions; and

(f) monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(iii) For a UST system using continuous vacuum, pressure, or liquid-filled methods of interstitial monitoring, the method must be capable of detecting a breach in both the inner and outer walls of the tank and/or piping.

(d) Methods of leak detection for piping. Each method of leak detection for piping used to meet the requirements of section 760-1803.3(b)(2) of this Article must be conducted in accordance with the following:

(1) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of petroleum through piping or triggering an audible or visual alarm may be used only if they detect leaks of 3 gallons per hour at 10 pounds per square inch line pressure within one hour.

(2) Line tightness testing.

(i) A periodic test of piping may be conducted only if it can detect a leak at the rate of 0.1 gallon per hour at one and one-half times the operating pressure.

(ii) Test reports.

(a) A copy of the test report must be provided by the facility to the Department within 30 days after performance of the test.

(b) All test reports must be in a form satisfactory to the Department and must include the following information:

(1) facility registration number;

(2) tank identification number used on the application form required in section 760-1801.9 of this Article for the UST and piping tested;

(3) date of test;

(4) results of test (passed; failed and leak rate);

(5) test method;

(6) certification by the technician that test complies with criteria for a tightness test in subparagraph (iii) of this paragraph;

(7) statement of technician's qualifications;

(8) address of technician;

(9) signature of technician;

(10) Department approved cover sheet; and

(11) all manually recorded and computer generated test data in a form acceptable to the Department.

(e) Leak detection recordkeeping. Every facility must maintain records demonstrating compliance with all applicable requirements of this section. These records must meet the following requirements:

(1) the results or records of any sampling, testing, inspection, or monitoring must be maintained for at least five years;

(2) the results of tank and line tightness testing must be retained until the next test is conducted;

(3) a copy of the results of tank and line tightness testing must be submitted to the Department within 30 days after performance of the test(s); and

(4) written documentation of all calibration, maintenance, and repair of leak detection equipment permanently located on-site must be maintained for at least five years after the servicing work is completed. Any schedules of required calibration and maintenance provided by the leak detection equipment manufacturer must be retained for five years from the date of installation.

(f) Electronic monitoring probes. All probes used for leak detection must be installed such that they are accessible for inspection. Continuous electronic monitoring probes located in tank sumps or UDC's must be rigidly mounted.

§760-1803.4 Reporting, investigation, and confirmation.

A facility must act in accordance with the provisions of the Environmental Conservation Law, the Navigation Law, and 6 NYCRR § 613-3.4 as implemented by NYSDEC with respect to any suspected or known spill. The citation to 6 NYCRR § 613-3.3(a) and (b), found in 6 NYCRR § 613-3.4(a)(3), must be read as a citation to § 760-1803.3(a) and (b) of this Article.

§760-1803.5 Out-of-service UST systems and closure.

(a) Out-of-service UST systems.

(1) (i) When a UST system is out-of-service, the facility must continue operation and maintenance of corrosion protection in accordance with section 760-1803.2(b) of this Article, and any leak detection in accordance with sections 760-1803.3(a) and (b) of this Article. A facility must comply with the requirements of 6 NYCRR Subpart 613-6 as implemented by NYSDEC if a release is confirmed.

(ii) Leak detection required under sections 760-1803.3(a) and (b) of this Article is not required as long as the UST has been emptied in accordance with subdivision (e) of this section and the fill port has been locked. The facility must give written notice to the Department a minimum of three business days prior to the facility stopping inspections and leak detection. However, leak detection required under sections 760-1803.3(a) and (b) of this Article must resume consistent with the original schedule or upon resumption of delivery of petroleum into the UST system, whichever is later.

(2) When a UST system is out-of-service for a period of 3 to 12 months, the facility must also comply with the following requirements:

(i) leave vent lines open and functioning; and

(ii) cap and secure all other piping, ancillary equipment and manways.

(3) When a UST system is out-of-service for more than 12 months, the facility must permanently close the UST system in accordance with subdivisions (b) and (c) of this section.

(b) Permanent closure.

(1) At least 30 days before beginning permanent closure, a facility must notify the Department of its intent to permanently close, unless such action is in response to corrective action. The permanent closure must be scheduled such that a representative of the Department may witness the procedure during the Department's normal business hours. The Department must be given a minimum of three business days' notice prior to the scheduled procedure. Within 30 days after permanent closure, a facility must submit a registration application to the Department, in accordance with section 760-1801.9 of this Article, indicating that the UST system has been permanently closed.

(2) To permanently close a UST system:

(i) The facility must empty the UST in accord with subdivision (e) of this section. Every tank that is part of a UST system that is permanently closed must also be either removed from the ground or filled with sand or concrete slurry. Filling with sand or concrete slurry may only be done with permission from the Department where extraordinary circumstances exist such as when complete removal is unreasonable because the tank is located beneath a building foundation. If sand or concrete slurry is used, all voids within the UST must be filled. All connecting and fill lines must be disconnected and removed or securely capped or plugged. Manways must be securely fastened in place. One of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references) must be adhered to in order to comply with this subparagraph:

(a) API RP 1604, March 1996;

(b) API RP 2016, August 2001;

(c) API RP 1631, June 2001; or

(d) NFPA 326, 2010 edition.

(ii) The facility must ensure that all scheduled deliveries to the UST system are terminated.

(c) Assessing the site at closure.

(1) Before permanent closure is completed, the facility must assess for the presence of a release where contamination is most likely to be present at the UST system location. In selecting assessment methods, the facility must consider the method of closure, the petroleum stored, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence of a release.

(2) If contaminated soils, contaminated groundwater, or petroleum as a liquid or vapor is discovered, the facility must begin corrective action in accordance with Subpart 6 of 6 NYCRR Part 613.

(d) Records for permanent closure. The facility must maintain for five years records that are capable of demonstrating compliance with closure requirements under this Subarticle. In addition, the facility must transmit a copy of the records to the Department within 30 days after permanent closure.

(e) The UST system is considered empty only after the UST system has been completely emptied of all liquid and cleaned of all residues, vented until dry and safe and secure. In emptying a UST system, the facility must assure that:

(1) Wash water is not discharged to the lands or waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

(2) Sludge accumulation on the bottom of the UST is removed, transported, and disposed of in a manner consistent with all State and Federal requirements for solid waste disposal.

Subarticle 760-1804 AST Systems

§760-1804.1 AST systems: design, construction, and installation.

(a) Applicability. The provisions of this Subarticle apply to every AST system that is part of a facility.

(b) Equipment standards for Category 1, 2 and 3 AST systems. In order to prevent releases due to structural failure, corrosion, or spills and overfills, any facility containing a Category 1, 2 or 3 AST system must meet the following requirements.

(1) Tanks.

(i) Every AST with a design capacity of 60 gallons or greater must be constructed of steel and must be designed and utilized according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references), as applicable:

(a) for Category 2 ASTs:

(1) UL 142, January 1985;

(2) API Standard 620, September 1982 (revised April 1985);

(3) API Standard 650, February 1984;

(4) CAN4-S601-M84, 1984; or

(5) CAN4-S630-M84, 1984;

(b) for Category 3 ASTs:

(1) UL 142, December 2006;

(2) UL 80, September 2007;

(3) UL 2258, August 2010;

(4) API Standard 620, February 2008;

(5) API Standard 650, March 2013; or

(6) ULC-S601-07, 2007.

(ii) Every AST must have a surface coating designed to prevent corrosion and deterioration.

(iii) Every AST, if in contact with the ground, must be protected from corrosion. Any Category 3 AST in contact with the ground must be protected from corrosion in accordance with API Standard 651, January 2007.

(iv) Every AST that is in contact with the ground must be lined with a properly bonded epoxy coating, or other approved coating system at points of contact.

Note: The Department recognizes that some petroleum mixtures cannot be safely stored in steel ASTs. A facility owner seeking to store such petroleum mixtures should, pursuant to the provisions of section 760-1801.8 of this Article, request a variance from the requirements of subparagraph (i) of this paragraph.

(v) Secondary containment.

(a) Every AST except those covered under clause *(c)* of this subparagraph must have secondary containment that meets the following requirements:

(1) be able to contain petroleum leaked from any portion of the AST until it is detected and removed;

(2) be able to prevent the release of petroleum; and

(3) have a containment area that is at least 110 percent of the AST design capacity.

(b) For any AST enclosed by a dike which acts as secondary containment, the volume of the diked area must be at least:

(1) 110 percent of the design capacity of the largest tank inside the diked area if all the ASTs are located outside of a building. The volume below the height of the dike occupied by tanks other than the largest tank cannot be used when calculating the containment volume.

(2) 110 percent of the total combined design capacities of all of the tanks contained in the diked area if any of the ASTs are located inside a building.

(c) Every Group 1 AST and every Group 3 AST with a design capacity less than 10,000 gallons is required to either have secondary containment as described in clause *(a)* of this subparagraph or utilize a design/technology such that a release is not reasonably expected to occur. The design/technology utilized must be approved by the Department.

(d) An impermeable barrier under an AST that is in contact with the ground must have a permeability rate to water equal to or less than 1×10-6 cm/sec and must be made of a material that does not deteriorate in an underground environment or in the presence of petroleum. Every AST must be capable of being monitored between the tank bottom and the impermeable barrier.

(e) The secondary containment may consist of any one of the following: a dike, under-tank liner, pad, pond, impoundment, curb, ditch, sump, tank used

for emergency or overflow containment, or other equipment capable of containing the petroleum stored. Construction of diking must be in accordance with the following:

(1) Category 1 and 2 AST systems: NFPA 30 (1984 edition), section 2-2.3.3; or

(2) Category 3 AST systems: NFPA 30 (2012 edition), section 22.11.2.

(f) If soil is used as part of the secondary containment, the soil must be of such character that any spill into the secondary containment will be readily recoverable.

(g) Where unique circumstances exist, the Department may allow the secondary containment to consist of a combination of containment methods specified in clause *(e)* of this subparagraph.

(h) Penetrations in the containment structure are only allowable under unique circumstances with approval from the Department.

(i) All joints in concrete must incorporate waterstops.

(j) Except for any field-constructed tank, every Category 3 AST must incorporate a method for preventing rain water from entering the containment structure.

*(k) S*econdary containment systems made of steel must not be in contact with the ground.

(2) Piping.

(i) Corrosion protection. Piping that routinely contains petroleum and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with clauses *(a)* or *(b)* of this subparagraph.

(a) Piping made of a non-corrodible material must meet the following conditions.

(1) The materials, joints, and joint adhesives must be compatible with petroleum, petroleum additives, and corrosive soils.

(2) All underground piping must be designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(3) All joints must be liquid and air tight.

(4) All underground piping must be tested for tightness before being covered, enclosed or placed in use. The test must be scheduled

such that a representative of the Department may witness the test during the Department's normal business hours. The Department must be given a minimum of three business days' notice prior to the scheduled test.

(5) All piping installed after October 11, 2015 must be designed and constructed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(i) UL 971, February 2006; or

(ii) ULC-S660-08, 2008.

(b) Piping made of steel that is cathodically protected must meet the following conditions:

(1) The cathodic protection system must provide a minimum of 30 years of protection in corrosive soils.

(2) Cathodic protection must be provided by the use of sacrificial anodes or impressed current.

(3) Where sacrificial anodes or impressed current systems are used, monitors to check on the adequacy of the system must be installed and kept in proper working condition. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the system must be repaired or the piping will be considered unprotected and must be tested for tightness in accordance with section 760-1804.3(d)(2) of this Article.

(4) Except where cathodic protection is provided by impressed current, underground piping must have dielectric bushings, washers, sleeves, or gaskets installed at the end to electrically isolate the piping from the AST and the dispenser. These dielectric connectors must be compatible with petroleum, petroleum additives, and corrosive soils.

(5) All underground piping must be designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(6) All joints must be liquid and air tight.

(7) All underground piping must be tested for tightness in accordance with section 760-1804.3(d)(2) of this Article before being covered, enclosed, or placed in use. The test must be scheduled such that a representative of the Department may witness the test during the Department's normal business hours. The Department must be

given a minimum of three business days' notice prior to the scheduled test.

(8) All piping installed after October 11, 2015 must meet the following conditions:

(i) the piping must be designed and constructed according to UL 971A, October 2006 (refer to section 760-1801.10 of this Article for complete citation of references);

(ii) the piping must be coated with a suitable dielectric material;

(iii) the cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(A) API RP 1632, January 1996 (revised 2002);

(B) STI R892, January 2006;

(C) NACE SP0169-2013, 2013; or

(D) NACE SP0285-2011, 2011;

(iv) every field-installed cathodic protection system must be designed by a corrosion expert;

(v) every impressed current system must be designed to allow determination of current operating status as required in section 760-1804.2(b)(2) of this Article; and

(vi) every cathodic protection system must be operated and maintained in accordance with section 760-1804.2(b) of this Article.

(ii) Secondary containment.

(a) With the exception of piping that is part of a Group 1 or 3 AST system, all sections of piping that routinely contain petroleum, located outside a building, must be secondarily contained and meet the following conditions:

(1) be able to contain petroleum leaked from the primary containment until it is detected and removed;

(2) be able to prevent the release of petroleum; and

(3) when piping is used as the secondary containment it must be constructed in accordance with subparagraph (i) of this paragraph.

(b) With the exception of piping that is part of a Group 3 AST system and the sections of piping that are readily visible inside a building, piping that routinely contains petroleum and is not in contact with the ground must be secondarily contained in accordance with clause (*a*) of this subparagraph and must be constructed in accordance to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(1) piping installed on or before October 11, 2015: NFPA 30 (1984 edition); or

(2) piping installed after October 11, 2015: NFPA 30 (2012 edition).

(3) Spill and overfill prevention equipment.

(i) Every AST must be equipped with a gauge which accurately shows the level of petroleum in the AST. The gauge must be accessible to the carrier and installed so it may be conveniently read.

(ii) Every AST must be equipped with a high-level warning device as follows:

(a) a Department approved electronic high-level warning alarm or high-level liquid pump cut-off controller is required for the following:

(1) every AST located outside a building with a design capacity greater than 1,100 gallons;

(2) every AST containing gasoline; and

(3) every AST with a design capacity greater than 1,100 gallons located inside a building, with the exception of any Group 3 AST;

(b) a vent whistle, a Department approved electronic high-level warning alarm or a high-level liquid pump cut-off controller is required for the following:

(1) every AST that is pump-filled and has a design capacity of 1,100 gallons or less with the exception of an AST containing gasoline; and

(2) every Group 3 AST.

(iii) With the exception of any AST contained in an open-top dike, a fill limiting device must be installed at the fill port which automatically and completely shuts off flow before an overfill can occur.

(a) A tight fill port connection must be used to prevent petroleum from overflowing the fill port when the tank is full.

(b) The tight fill adapter on the tank must be constructed so that it will not accept a loose fill nozzle.

(c) A warning must be posted on the tank near the fill port to alert the fill operator of the necessity to use a tight fill nozzle and the spill hazards possible with a loose fill connection.

(iv) The tank must be constructed so that petroleum is contained within the secondary containment should an overfill occur.

(v) Spill buckets.

(a) With the exception of a Group 1 or 3 AST system, tank fill ports must have secondary containment.

(b) With the exception of fill ports located within a diked area or on a Group 1 or 3 AST system, tank fill ports must be equipped with a five gallons minimum capacity spill bucket.

(4) Installation.

(i) Every Category 2 and 3 AST system must be installed in accordance with the manufacturer's instructions.

(ii) With the exception of Group 1 and 3 ASTs, every Category 2 and 3 AST system must be installed according to section 760-1801.9(j) of this Article.

(iii) Every AST system must be supported on a well-drained stable foundation which prevents movement, rolling, and settling of the AST and is designed to minimize corrosion of the tank bottom. Concrete is the preferred foundation material. However, other materials will be considered by the Department if approved by the AST manufacturer or design professional.

(iv) Prior to first receipt of petroleum, every AST and associated double-walled piping must be demonstrated to be free of leaks. The testing method used must be approved by the Department. The test must be scheduled such that a representative of the Department may witness the test during the Department's normal business hours. The Department must be given a minimum of three business days' notice prior to the scheduled test. The tank in a Category 3 AST system must be tested for tightness and inspected according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(a) API Standard 650, March 2013;

(b) API Standard 653, April 2009;

(c) PEI RP200, 2013 edition;

(d) STI SP001, September 2011; or

(e) UL 142, December 2006.

(v) Every Category 2 and 3 AST system must be installed in accordance with the general requirements for tank installation in sections 760-1806.2(b).

(5) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 4-3.6 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 6.3.9 meets the requirements of this subparagraph.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the AST system in case of piping or dispenser hose failure. For a valve installed on or before October 11, 2015, a valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30A (2012 edition), section 4.2.4 meets the requirements of this subparagraph.

(iii) Every fill pipe leading to a pump-filled AST must be equipped with a properly functioning check valve or equivalent device which provides automatic protection against backflow. A check valve is required only when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.

(iv) Each connection on a gravity-drained AST through which petroleum can normally flow must be equipped with an operating valve to control the flow. For a valve installed on or before October 11, 2015, a valve which meets the standards set forth in NFPA 30 (1984 edition), section 2-2.7.1 meets the requirements of this subparagraph. For a valve installed after October 11, 2015, a valve meeting the standards set forth in NFPA 30 (2012 edition), section 22.13.1 meets the requirements of this subparagraph.

(6) Dispenser systems.

(i) With the exception of dispensers mounted directly to the tank and not in contact with the ground, dispensers mounted outside the secondary containment for an AST system must be equipped with under-dispenser containment.

(ii) Under-dispenser containment must be liquid-tight on its sides, on the bottom, and at any penetrations. Under-dispenser containment must allow for visual inspection and access to the components in the containment system and be continuously electronically monitored for leaks from the dispenser system.

§760-1804.2 General operating requirements.

(a) Spill and overfill prevention.

(1) Every facility must ensure that releases due to spilling or overfilling do not occur. One of the transfer procedures described in NFPA 385 (2012 edition) or API RP 1007 (March 2001 edition) must be used in order to comply with the requirement of this paragraph, unless those procedures are technically infeasible. In circumstances of technical infeasibility, the facility must develop and employ practices to ensure that releases due to spilling or overfilling do not occur.

(2) The facility must report, investigate, and clean up any spills and overfills in accordance with section 760-1804.4 of this Article.

(3) Every AST must be marked (for example, with stenciled letters) with the tank contents, registration identification number, as well as the tank design and working capacities.

(4) Every AST system must be color coded in accordance with API RP 1637 at or near the fill port. If an AST system contains petroleum that does not have a corresponding API color code, the facility must otherwise mark the AST (for example, with stenciled letters) to identify the petroleum currently in the AST system. If the fill port is remote from the AST such that the AST cannot be properly identified by sight from the fill port, the facility must also place the marking near the fill port to identify the petroleum currently in the AST system. For any fill port connected to multiple AST systems storing different types of petroleum, the facility may place the marking near the fill port (for example, with a label or placard) to identify the types of petroleum in the AST systems.

(5) Where there are monitoring wells located at a facility, every monitoring well must be clearly identified as a monitoring well to prevent accidental delivery of petroleum to the monitoring well and must be sealed or capped so as to prevent liquid from entering the well from the surface.

(6) The facility must keep all gauges, valves, and other equipment for spill prevention in good working order.

(7) Immediately prior to a delivery, the carrier must determine that the AST has available working capacity to receive the volume of petroleum to be delivered. Every aspect of the delivery must be monitored and immediate action must be taken to stop the flow of petroleum when the working capacity of the AST has been reached or should an equipment failure or emergency occur.

(b) Operation and maintenance of corrosion protection. Every facility having a Category 2 or 3 metal AST system with corrosion protection must comply with the following requirements to ensure that a release due to corrosion is prevented until the AST system is permanently closed pursuant to section 760-1804.5(b) of this Article:

(1) All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the AST and piping that routinely contains petroleum and is in contact with the ground.

(2) All AST systems equipped with cathodic protection systems must be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(i) frequency. Every cathodic protection system must be tested at yearly intervals; and

(ii) inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section must be according to one of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references):

(a) API RP 651, January, 2007; or

(b) NACE RP0193-2001, 2001 edition.

(3) Every AST system with impressed current cathodic protection systems must also be inspected every 30 days to ensure the equipment is running properly.

(4) For AST systems using cathodic protection, records of the operation of the cathodic protection must be maintained to demonstrate compliance with the requirements of this section. The records generated to meet the provisions of paragraphs (2) and (3) of this subdivision must be kept for five years.

(c) Compatibility. Every facility must use an AST system made of or lined with materials that are compatible with the petroleum stored in the AST system.

(d) Repairs and modifications.

(1) Permanent repairs.

(i) All repairs must be equal to or better than the standards of original construction. Such repairs must consist of:

(a) steel welds or steel patches which are welded in place; or

(b) practices set forth in paragraph (3) of this subdivision.

(ii) All welds associated with the repair of an AST must be inspected and tested for tightness before the AST is returned to service.

(2) Cleaning of tank prior to repair.

(i) Prior to repair, an AST must be cleaned. Wash water must not be discharged to the lands or waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

(ii) Sludge which has accumulated on the bottom of the AST must be removed, transported, and disposed of in a manner consistent with all applicable State and Federal requirements for solid waste disposal.

(3) Lining specifications.

(i) Any non-corrodible epoxy-based resins or equivalent lining which is bonded firmly to the interior surfaces may be used as a lining to protect an AST from future corrosion.

(ii) The lining must be of sufficient thickness, density, and strength to form a hard impermeable shell which will not crack, soften, or separate from the interior surface of the AST.

(iii) The lining's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the lining.

(iv) The lining must be compatible with petroleum products and petroleum additives.

(v) The lining material must be applied and cured in strict accord with manufacturer's specifications.

(vi) Linings used to protect the bottom of an AST must extend up the side of the tank a minimum of 18 inches.

(4) Inspection of lining. The lining must be checked for air pockets and blisters, and electrically tested for pinholes. The lining thickness must be checked with an Elcometer Thickness Gauge or equivalent and the hardness checked with a Barcol Hardness Tester or equivalent to assure compliance with manufacturer's specifications. Any defects must be repaired.

(5) Manufacturer's guarantee. A lining must be installed under the direction of the lining manufacturer or a certified representative. The manufacturer or representative must guarantee to the owner in writing that the lining will not leak the product specified in storage and the lining will not deteriorate in any way for a period of 10 years. A copy of the guarantee must be kept by the owner for the life of the AST.

(6) Substantial Repairs or modifications. Substantial repairs or modifications require prior approval of the Department before they may be performed. Substantial repairs or modifications must be scheduled such that a representative of the Department may witness the work during the Department's normal business hours. The Department must be given a minimum of three business days' notice to facilitate all required inspections. Backfilling, where required, may not occur until approved by the Department.

(7) An AST which has leaked may not be reused without having the AST inspected in accordance with section 760-1804.3(b)(2)(i) and (ii). An inspection report that complies with

section 760-1804.3(c)(2) must be filed with and accepted as complete by the Department before the tank may be filled or reused.

(e) Tank systems in locations subject to flooding.

(1) For Category 1 and 2 AST systems located in an area where the AST may become buoyant because of a rise in the water table, flooding, or accumulation of water, the facility must maintain safeguards in accordance with sections 2-5.6 of NFPA 30 (1984 edition). If such safeguards include ballasting of an AST with water during flood warning periods, tank system valves and other openings must be closed and secured in a locked position in advance of the flood. Ballast water removed from the AST after the flood must not be discharged to the waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

(2) Every Category 3 AST system located in an area where the AST may become buoyant because of a rise in the water table, flooding, or accumulation of water must be anchored.

(f) Stormwater management. Stormwater which collects within the secondary containment system must be controlled by a manually operated pump or siphon. All pumps, siphons and valves must be properly maintained and kept in good condition. Stormwater or any other discharge at a facility must be uncontaminated and free of sheen prior to discharge. Stormwater which is contaminated must not be discharged to the waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

§760-1804.3 Inspections and leak detection.

(a) Specific requirements for Category 1, 2, and 3 AST systems.

(1) Tank systems.

(i) Every facility having an AST system must inspect the AST system at monthly intervals in accordance with section 760-1804.3(b)(1) of this Article.

(ii) Except as provided in subparagraph (iv) of this paragraph, every Category 1 AST system that has a tank with a design capacity of less than 10,000 gallons must be inspected at ten year intervals in accordance with section 760-1804.3(b)(2) of this Article.

(iii) Except as provided in subparagraph (iv) of this paragraph, every Category 1 AST system that has a tank that has a design capacity of 10,000 gallons or more must be inspected at seven year intervals in accordance with section 760-1804.3(b)(2) of this Article.

(iv) Any Category 1 AST system that has a tank as described in clause *(a)* or *(b)* of this subparagraph is exempt from the requirements established in subparagraphs (ii) and (iii) of this paragraph.

(a) An AST that is entirely aboveground, such as a tank on a rack, cradle or stilts.

(b) An AST that stores only No. 5 or No. 6 fuel oil.

(v) Leak detection. Except for an AST described in clauses *(a)* through *(c)* of this subparagraph, secondary containment must be equipped with continuous electronic monitoring:

(a) an AST contained within an open-top dike;

(b) an AST contained within a covered dike that can be uncovered and inspected without the use of tools; and

(c) an AST with a design capacity of 1,100 gallons or less, excluding any AST storing gasoline.

(2) Underground piping that routinely contains petroleum must be monitored for leaks as follows:

(i) Underground pressurized piping.

(a) Underground piping installed before December 27, 1986 that conveys petroleum under pressure must be tested for tightness in accordance with section 760-1804.3(d)(2) of this Article at 10-year intervals.

(b) Underground piping installed on or after December 27, 1986 that conveys petroleum under pressure and is part of an AST system storing motor fuel must be equipped with an automatic line leak detector that is operated in accordance with section 760-1804.3(d)(1) of this Article.

(ii) Underground suction piping and gravity-fed piping. Underground piping installed before December 27, 1986 that conveys petroleum under suction or hydrostatic pressure from the AST must be tested for tightness in accordance with section 760-1804.3(d)(2) of this Article at 10-year intervals.

(3) Secondary containment piping that does not drain unimpeded into an open-top dike must be equipped with continuous electronic monitoring.

(4**)** All probes used for leak detection must be installed such that they are accessible for inspection. Continuous electronic monitoring probes located in a containment area must be rigidly mounted.

(b) Inspections of AST systems. Inspections of AST systems must be conducted in accordance with the following:

(1) Monthly inspections. The inspection must include, as applicable, identification of leaks, cracks, areas of wear, corrosion and thinning, poor maintenance and operating practices, excessive settlement of structures, separation or swelling of tank insulation, malfunctioning equipment, and structural and foundation weaknesses.

(i) For an AST system that includes a tank that is fully enclosed within pre-fabricated secondary containment, the inspection must cover the exterior surfaces of:

(a) the secondary containment of the AST; and

(b) the accessible portions of piping and ancillary equipment.

(ii) For an AST system that includes a tank that is insulated in order to store heated petroleum and is within secondary containment, the inspection must cover the exterior surfaces of:

(a) the insulation of the AST; and

(b) the accessible portions of piping and ancillary equipment.

(iii) For an AST system not covered under subparagraph (i) or (ii) of this paragraph, the inspection must cover the exterior surfaces of the tank, piping, and ancillary equipment.

(iv) For every AST system, the inspection must cover any leak detection system, cathodic protection monitoring equipment, or other monitoring or warning system which may be in place.

(2) Seven and Ten-year inspections.

(i) The inspection must include:

(a) an inspection that is conducted in accordance with API Standard 653 (April 2009) or STI SP001 (September 2011), and a tightness test of any underground piping; or

(b) a tightness test of the AST system that is performed in accordance with subdivision (c) of this section.

(ii) Inspections must be conducted by a registered professional engineer with education and experience in AST system inspection or by an API 653 certified inspector.

(iii) For ASTs with a design capacity of 10,000 gallons or more, an inspection report must be filed with the Department within 30 days after each inspection and before the tank is refilled.

(c) Tightness testing of ASTs.

(1) Qualifications of test technicians. All tightness tests must be performed by a technician who has an understanding of variables which affect the test and is trained in the performance of the test.

(2) Test reports.

(i) A copy of the test report must be provided by the facility to the Department within 30 days after performance of the test.

(ii) All test reports must be in a form satisfactory to the Department and must include the following information:

(a) facility file reference number;

(b) tank identification number used on the application form required in section 760-1801.9 of this Article for the AST tested;

(c) date of test;

(d) results of test (passed; failed and leak rate);

(e) test method;

(f) certification by the technician that test complies with criteria for a tightness test in subparagraph (iii) of this paragraph;

(g) statement of technician's qualifications;

(h) address of technician;

(i) signature of technician;

(j) Department approved cover sheet; and

(k) all manually recorded and computer generated test data in a form acceptable to the Department.

(iii) Tank tightness testing must be capable of detecting a leak at the rate of 0.1 gallon per hour from any portion of the AST that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(d) Methods of leak detection for underground piping. Each method of leak detection for piping used to meet the requirements of section 760-1804.3(a)(2) of this Article must be conducted in accordance with the following:

(1) Automatic line leak detectors. Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of petroleum through piping or triggering an audible or visual alarm may be used only if it will detect a leak of 3 gallons per hour at 10 pounds per square inch line pressure within one hour.

(2) Line tightness testing. A periodic test of piping may be conducted only if it can detect a leak at the rate of 0.1 gallon per hour at one and one-half times the operating pressure.

(e) Inspection and leak detection recordkeeping. Every facility must maintain records demonstrating compliance with all applicable requirements of this section. These records must include the results of monthly, 7-year inspections and 10-year inspections. Monthly inspection records must be maintained for at least 5 years. Seven-year inspection records and 10-year inspection records must be maintained for at least 10 years. A copy of the results of tank tightness testing must be submitted to the Department within 30 days after performance of the test. At a minimum, the records must list each component tested and describe any action taken to correct an issue.

(f) Additional testing and inspection. When a leak is suspected, or where inspections or tests required by this Article have not been performed, the Department may order the facility to inspect and to test the AST system or equipment for tightness. If the facility fails to conduct such inspections and

tests within 10 days after receipt of the Department's order, the Department may conduct inspections or tests for tightness. The expenses of conducting such tests as ordered by the Department must be paid by the tank system owner.

(g) Maintenance of secondary containment. With the exception of double-walled ASTs that utilize a liquid-filled space between the tank walls for leak detection purposes, a facility must maintain secondary containment systems in a dry condition. Any liquid which enters secondary containment must be removed within 24 hours. If fluid is being used as part of a leak detection system, it must be maintained at the proper level.

§760-1804.4 Reporting, investigation, and confirmation.

A facility must act in accordance with the provisions of the Environmental Conservation Law, the Navigation Law, and 6 NYCRR § 613-4.4 as implemented by NYSDEC with respect to any suspected or known spill. The citation to 6 NYCRR § 613-4.3(a), found in 6 NYCRR § 613-4.4(a)(3), must be read as a citation to section 760-1804.3(a) of this Article.

§760-1804.5 Out-of-service AST systems and closure.

(a) Out-of-service AST systems.

(1) (i) When an AST system is out-of-service, the facility must continue operation and maintenance of corrosion protection in accordance with section 760-1804.2(b) of this Article, and inspections and leak detection in accordance with section 760-1804.3(a) of this Article. The facility must comply with the requirements of 6 NYCRR Subpart 613-6 as implemented by NYSDEC if a release is confirmed.

(ii) Inspections and leak detection required under section 760-1804.3(a) of this Article are not required as long as the AST system has been emptied in accordance with subdivision (d) of this section and the fill port has been locked. The facility must give written notice to the Department a minimum of three business days prior to the facility stopping inspections and leak detection. However, inspections and leak detection required under section 760-1804.3(a) of this Article must resume consistent with the original schedule or upon resumption of delivery of petroleum into the AST system, whichever is later.

(2) When an AST system is out-of-service for a period of 3 to 12 months, the facility must also comply with the following requirements:

(i) leave vent lines open and functioning; and

(ii) cap and secure all other piping, ancillary equipment and manways.

(3) When an AST system is out-of-service for more than 12 months, the facility must permanently close the AST system in accordance with subdivision (b) of this section, unless the AST system is located at a facility where one or more other tank systems are not out-of-service.

(b) Permanent closure.

(1) At least 30 days before beginning permanent closure, a facility must notify the Department of its intent to permanently close, unless such action is in response to corrective action. The work must be scheduled such that a representative of the department may witness the work during the department's normal business hours. A minimum notice of three business days must be given to the department to facilitate all required inspections prior to permanent closure. Within 30 days after permanent closure, a facility must submit a registration application to the Department, in accordance with section 760-1801.9 of this Article, indicating that the AST system has been permanently closed.

(2) To permanently close an AST system, the facility must empty and clean it by removing all liquids, vapors, and accumulated sludge. One of the following codes of practice (refer to section 760-1801.10 of this Article for complete citation of references) must be adhered to in order to comply with this paragraph:

(i) API RP 2016, August 2001; or

(ii) NFPA 326, 2010 edition.

(3) Every tank that is part of an AST system that is permanently closed must be removed from the site or placed in dry storage. The facility must obtain permission from the Department to maintain the permanently closed AST in place. The AST must be stenciled with the date of permanent closure.

(4) ASTs that are permanently closed that remain at the facility must be protected from flotation.

(5) AST systems that have been permanently closed may not be returned to service unless the entire AST system meets the requirements for Category 3 AST systems.

(c) Records for permanent closure. The facility must maintain for five years records that are capable of demonstrating compliance with closure requirements under this Subarticle. In addition, the facility must transmit a copy of the records to the Department within 30 days after permanent closure.

(d) The AST system is considered empty only after the AST system has been completely emptied of all liquid and cleaned of all residues, vented until dry and safe and secure. In emptying an AST system, the facility must assure that:

(1) Wash water is not discharged to the lands or waters of the State unless the discharge is in conformance with the standards of 6 NYCRR Parts 701, 702, 703, and 750, as applicable.

(2) Sludge accumulation on the bottom of the AST is removed, transported, and disposed of in a manner consistent with all State and Federal requirements for solid waste disposal.

Subarticle 760-1805 Delivery Prohibition

§760-1805.1 Circumstances and process for imposing a delivery prohibition.

(a) Tier 1 conditions.

(1) When the Department finds that a Tier 1 condition exists (as defined below) at a facility, the Department will affix a tag on the fill pipe of the relevant tank system.

(2) At the time that it affixes a tag, the Department will provide to the facility operator, if one is present, a written notification of the imposition of the delivery prohibition that will include the finding of the relevant condition(s) at the facility. The Department will then send the written notification to the facility via certified mail to the correspondence address listed in the current facility registration or license within five business days following the time that the tag is affixed to the tank system.

(3) The following are Tier 1 conditions:

(i) A tank system is known to be releasing petroleum. If the source of the release cannot be determined upon inspection, then all tank systems at the facility that are probable sources of the release will be tagged.

(ii) A UST system covered under sections 760-1802.1(a), 760-1803.1(a)(2), or 760-1803.1(a)(4) of this Article does not have one or more of the following:

(a) secondary containment equipment required under sections 760-1802.1(b)(1)(iv), 760-1802.1(b)(2)(ii)*(c)*, and 760-1803.1(b)(1)(iv) of this Article;

(b) spill and overfill prevention equipment required under section 760-1802.1(b)(3) of this Article or overfill prevention equipment required under section 760-1803.1(b)(3) of this Article;

(c) corrosion protection equipment required under sections 760-1802.1(b)(1)(ii), 760-1802.1(b)(2)(ii), 760-1802.1(c)(2)(ii), 760-1802.1(c)(2)(iii), 760-1802.1(c)(3), 760-1803.1(b)(1)(ii), or 760-1803.1(b)(2)(ii) of this Article; or

(d) leak detection equipment required under sections 760-1802.3(a) and (b), or sections 760-1803.3(a) and (b) of this Article.

(b) Tier 2 conditions.

(1) When the Department finds that a Tier 2 condition exists at a facility, the Department may affix a tag on the fill pipe of the relevant tank system.

(2) Prior to affixing a tag, the Department will send a written statement to the facility informing the facility of the relevant condition(s). The Department will send the statement via certified mail or by hand delivery to the correspondence address listed in the current facility registration or license.

(3) At the time that it affixes a tag, the Department will provide to the facility operator, if one is present, a written notification of the imposition of the delivery prohibition that will include the finding of the relevant condition(s) at the facility. The Department will then send the written notification to the facility via certified mail to the correspondence address listed in the current facility registration or license within five business days following the time that the tag is affixed to the tank system.

(4) The following are Tier 2 conditions:

(i) The results of leak detection required by sections 760-1802.3(a) and (b) and 760-1803.3(a) and (b) of this Article, or inspections and leak detection required by sections 760-1804.3(a) and (b) of this Article indicate that the tank system may be leaking petroleum or would not contain a leak if one were to occur, unless the facility submits, within 10 days after receipt of the Department's statement issued pursuant to paragraph (2) of this subdivision, acceptable documentation to the Department that demonstrates that the relevant tank system is not leaking or has been appropriately repaired.

(ii) With respect to the operation of a UST system covered under sections 760-1802.1(a), 760-1803.1(a)(2), or 760-1803.1(a)(4) of this Article, the facility has not demonstrated within 30 days following receipt of the Department's statement issued pursuant to paragraph (2) of this subdivision compliance with the following standards:

(a) spill and overfill prevention operating standards under section 760-1802.2(a) of this Article;

(b) corrosion protection operating standards under section 760-1802.2(b) of this Article; or

(c) applicable leak detection methods under section 760-1802.3(c) and (d) of this Article.

(iii) With respect to the operation of a UST system covered under sections 760-1803.1(a)(1) or (3) of this Article, one or more of the following is missing and the facility has not documented to the Department that the missing component has been put in place within 30 days after receipt of the Department's statement issued pursuant to paragraph (2) of this subdivision:

(a) secondary containment equipment required under section 760-1803.1(b)(1)(iv) of this Article;

(b) overfill prevention equipment required under section 760-1803.1(b)(3) of this Article;

(c) corrosion protection equipment required under sections 760-1803.1(b)(1)(ii) and (2)(ii) of this Article; or

(d) leak detection equipment required under sections 760-1803.3(a) and (b) of this Article.

(iv) With respect to the operation of an AST system covered under section 760-1804.1(a) of this Article, one or more of the following is missing and the facility has not documented to the Department that the missing component has been put in place within 30 days after receipt of the Department's statement issued pursuant to paragraph (2) of this subdivision:

(a) secondary containment equipment required under sections 760-1804.1(b)(1)(v) and (c)(1) of this Article;

(b) overfill prevention equipment required under sections 760-1804.1(b)(3) and (c)(2) of this Article;

(c) corrosion protection equipment required under sections 760-1804.1(b)(1)(ii) and (iii), and (2)(ii) of this Article; or

(d) leak detection equipment required under section 760-1804.3(a) of this Article.

(c) Withhold the imposition of the delivery prohibition. The Department may issue the written finding, consistent with paragraph (a)(2) or (b)(3) of this section, that a Tier 1 or Tier 2 condition exists, but withhold the imposition of the delivery prohibition for a period that may not exceed 180 days, where:

(1) there is no evidence that the tank system is leaking; and

(2) imposing the delivery prohibition would jeopardize public health or safety or the availability of, or access to, fuel in a rural and remote area.

§760-1805.2 Prohibitions.

(a) Delivery prohibition. No person may deliver or cause the delivery of petroleum to any tank system to which a tag is affixed. No person may accept petroleum to any tank system to which a tag is affixed.

(b) Tag tampering and removal prohibition. Unless authorized by the Department, no person may tamper with or remove a tag affixed to a tank system or cause such tampering or removal.

§760-1805.3 Notifications.

(a) Notice of delivery prohibition to facility and carrier. The presence of a tag affixed to the fill pipe of a tank system constitutes notice of the delivery prohibition.

(b) Notification to carrier by facility. After the Department affixes a tag to the fill pipe of a tank system, the facility must, prior to the next scheduled delivery of petroleum, inform all carriers that normally deliver to the tank system that delivery is prohibited. The facility must retain a record of all correspondence and other communications required by this section regarding the delivery prohibition.

§760-1805.4 Termination of delivery prohibition.

(a) Termination. A delivery prohibition may be terminated by the Department on its own initiative, or following the conclusion of review of compliance submissions or an expedited hearing.

(1) Department initiative. If the Department terminates a delivery prohibition on its own initiative, the Department will send a written notification to the facility confirming that the prohibition has been terminated. The Department will send the notification via certified mail to the correspondence address listed in the current facility registration or permit.

(2) Review of compliance submissions.

(i) A facility may, at any time, submit information to the Department demonstrating that the facility is in compliance or has corrected the condition(s) that prompted the Department to impose the prohibition.

(ii) Upon submission of information to the Department, the Department will review submissions and provide a written decision as set forth below.

(iii) The Department will provide a written decision to the facility within five business days after the Department receives the facility's submission. If the Department denies termination of the delivery prohibition, the decision will set forth the reasons for the denial including a description of any deficiency in the information supplied by the facility.

(iv) The decision of the Department will constitute a final agency determination subject to challenge under Article 78 of the Civil Practice Law and Rules.

(v) The Department will retain the record generated during the staff review process for one year or longer as required by law or County policy.

(3) Expedited hearing.

(i) Not later than 15 days after a tag has been affixed to a tank fill port, the Department will provide the facility with an opportunity to present proof on the limited issue of whether the Department incorrectly determined that any Tier 1 or Tier 2 conditions existed at the facility. Notice of such hearing will be sent together with the written notification of any delivery prohibition issued pursuant to sections 760-1805.1(a)(2) or (b)(3) of this Article.

(ii) The Department will provide the documents or other evidence or information in its possession at the time of decision in support of its determination to affix the tag.

(iii) The failure of the facility to appear at the time and place scheduled for the expedited hearing will constitute a waiver of the opportunity for an expedited hearing.

(iv) The expedited hearing will be held before a Department hearing officer. The hearing officer will make a report to the Department setting forth the appearances, the

arguments presented at the hearing, findings of fact and conclusions of law, and a recommended determination for consideration by the Department.

(v) Reserved **********

(vi) The expedited hearing will be recorded. The hearing officer will cause a typed transcript of the record to be prepared for the Department's files, but will not wait for the preparation of this transcript before making a report to the Department, if so requested by the facility or the Department.

(vii) The hearing officer will issue his or her report within 30 days after the close of the hearing, unless the parties agree to an extension of this time.

(b) Removal of a tag. Within two business days after a decision by the Department that all Tier 1 and Tier 2 conditions at a facility have been resolved, the Department will remove, or authorize the removal of, the tag.

Subarticle 760-1806 Permit to Construct and General Installation Requirements

§760-1806.1 Required components of a Permit to Construct application.

Documents and plan sets submitted as part of an application for a Permit to Construct as required by 760-1801.9(a); 760-1801.9(j); 760-1802.1(b)(4)(i) and (ii); 760-1803.1(b)(4)(i) and (ii); and 760-1804.1(b)(4)(ii) must include the following:

(a) a completed application for Permit to Construct form with all sections filled out and with all the required signatures;

(b) a completed registration form signed by the property owner. If the design professional is authorized to sign for the property owner, then a letter from the owner/operator stating that the design professional is given authority to sign the registration document must be submitted along with the registration form;

(c) a filing fee, as specified in the Department's Fee Schedule, made payable to 'Suffolk County Department of Health Services' must be included with the submission; and

(d) a complete plan set that includes the following:

(1) a Certificate of Authorization (C of A) as issued by the New York State Dept. of Education to engineering firms. If the design professional is not required to have a C of A, then an exemption form, explaining why no C of A is needed, must be completed and included with the submission. The exemption form is available from the Department's Office of Pollution Control or on the Department's web site. Note that architects and architectural firms are not required to submit a C of A; therefore, they must submit the exemption form;

(2) each page will have the following:

(i) a title block that includes the following information:

(a) the architectural or engineering firm's name, address and telephone number;

(b) the professional engineer's or registered architect's original seal and signature;

(c) the facility's name and address;

(d) the Suffolk County Tax Map (SCTM) to include district, section, block and lot; and

(e) The facility file reference number;

(ii) a 4" x 6" box labeled "Suffolk County Approval Stamp" placed in the lower right hand corner of each drawing sheet; and

(iii) scale of drawing;

(3) plans must contain the following:

(i) a key map that highlights the location of the facility. The key map must include nearby streets and a north arrow; and

(ii) a site plan drawn to a suitable scale showing the following:

(a) a north arrow;

(b) existing and proposed structures;

(c) property lines with dimensions and metes and bounds;

(d) the location of existing USTs, ASTs and closed-in-place tanks. Every existing and closed UST and AST must be labeled with the Department assigned tank number;

(e) the location of proposed USTs and ASTs. The separation distances between the tanks must be shown;

(f) existing and proposed piping. Existing piping must be labeled with its installation date. The piping should be coded to identify the liquid being conveyed, e.g. “D” for diesel fuel, “G” for gasoline, etc.;

(g) the location of electronic monitoring panels, remote annunciators and monitoring probes;

(h) the location of water supply wells, located on the site or within 500 feet of the site;

(i) the location of potable water supply piping on the site that will be present when the tanks are placed into service;

(j) the location of fire water supply piping that will be present when the tanks are placed into service;

(k) the location of sanitary systems or sewer lines, which will be present when the tanks are placed into service;

(l) the location of dry wells;

(m) the location of any surface waters that are on the site or within 200 feet of the site;

(n) the location of any soil borings; monitoring wells; and recovery wells; and

(o) any applicable notes such as Scope of Work, General Notes, etc.;

(4) the construction drawings must illustrate all proposed USTs and ASTs and all piping. The construction drawings must include a plan view and elevation view of the proposed tanks. Appropriate details must be included which will assist the reviewer in comprehending the extent of the project;

(i) the following must be included in the plan view, drawn to an appropriate scale, for proposed USTs:

(a) proposed tank with dimensions;

(b) the dimensions of concrete pads located above or below tanks. The distance the concrete pad extends beyond the edge of the tank must be shown;

(c) the position of tank sumps with fittings labeled as to their use (e.g. fill, vent, supply, return, vapor recovery, annular space monitoring sensor, liquid level probe, etc.). The equipment inside the tank sump need not be shown on this plan view;

(d) piping. This includes piping that routinely contains petroleum, vent piping, and stage I piping; and

(e) the location of electronic monitoring panels, remote annunciators and monitoring probes;

(ii) the following must be included in the elevation view, drawn to an appropriate scale, for proposed USTs:

(a) the proposed USTs including dimensions;

(b) finished grade, burial depth, excavation depth and depth to groundwater;

(c) bedding and backfill material;

(d) the separation distance between the USTs and between USTs and the edge of the excavation;

(e) tank sumps showing the equipment such as submersible turbine pumps, leak detection sensors, etc. that will be installed within the tank sumps;

(f) manhole frames and covers. The separation distances must be shown;

(g) concrete pad details including reinforcement; and

(h) the anchoring and strapping of any deadmen anchoring system if required to prevent flotation;

(iii) the following must be included in the plan view, drawn to an appropriate scale, for proposed ASTs:

(a) the proposed ASTs including dimensions;

(b) fittings and other ancillary equipment and their proposed use, e.g. supply piping, return piping, fill, leak detection sensor, liquid level probe, valves, pumps, etc.;

(c) concrete pad details including reinforcement;

(d) all piping including specifications; and

(e) the location of protective bollards where ASTs may be subject to damage by vehicular traffic;

(iv) the following must be included in the elevation view, drawn to an appropriate scale, for proposed ASTs:

(a) the proposed ASTs including dimensions;

(b) fittings and other ancillary equipment and their proposed use, e.g. supply piping, return piping, fill, leak detection sensor, liquid level probe, valves, pumps, fill spill containment sumps, etc.;

(c) concrete pad details including reinforcement; and

(d) AST labeling showing the following:

(1) the SCDHS tank number shown as "SCDHS ##". This number will be assigned by the Department, so it will not be necessary to indicate a number on the plan;

(2) tank contents;

(3) design capacity of the AST; and

(4) working capacity of the AST.

(v) A schedule of materials must be included on one of the plan sheets.

§760-1806.2 General requirements for tank Installation.

In addition to the other requirements of this Article, the following will also apply.

(a) USTs.

(1) For Category 3 USTs subject to tidal groundwater fluctuations, filter fabric must be installed between the native soils and the backfill material.

(2) In areas where the groundwater may be less than 20 feet below grade, a test well must be installed to verify groundwater elevation.

(3) When a tank may be subject to buoyant forces, buoyancy calculations must be submitted demonstrating that the tank is protected against floatation.

(4) Tank anchoring hardware that is not provided by the tank manufacture as part of the tanks system must be corrosion resistant.

(5) Concrete pads must meet tank manufacturer's requirements and Department requirements.

(6) The bedding depth must be a minimum of 12 inches beneath each tank.

(7) The backfill material must be as specified by the tank manufacturer's installation instructions.

(8) The separation distances as detailed in the tank manufacturer's installation instructions must be followed.

(9) The separation distance between the skirt of a manhole frame assembly and the sides of tank sumps must be 2 inches clear all around.

(10) The following setbacks must be maintained:

(i) potable water supply wells must be a minimum of 50 feet from USTs;

(ii) potable water supply piping must be a minimum of 7 feet from USTs;

(iii) leaching pools must be a minimum of 20 feet from USTs; and

(iv) dry wells must be a minimum of 20 feet from USTs.

(b) ASTs.

(1) Concrete pads must extend a minimum of 1 foot beyond the edge of the AST in all directions.

(2) ASTs must be protected from vehicle impact. Where bollards are used, the separation distance between bollards must not exceed four feet.

(3) ASTs must be clearly labeled with the product name on at least four locations, evenly spaced around the perimeter of the AST.

(4) ASTs must be clearly labeled with the Department issued unique identification number.

(Adopted 4/17/2017; Effective 3/1/2019)