

6 NYCRR PART 613
PETROLEUM BULK STORAGE

(Statutory Authority: Environmental Conservation Law (ECL) sections 1-0101, 3-0301, 3-0303, 17-0301, 17-0303, 17-0501, 17-1001 through 17-1017, and 17-1743; Navigation Law sections 170, 171, 172, 173, 175, 176, 178, 181 and 191.)

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Subpart 613-1 General Provisions

613-1.1 Purpose.

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

613-1.2 Applicability.

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

(b) Every on-shore major facility is subject to the provisions of this Part except for the provisions of section 1.9 of this Subpart.

(c) Every facility owner, tank system owner, and operator is subject to the provisions of sections 1.13(a), (b), and (c), 2.2(d)(4), 3.2(d)(4), 4.2(d)(4), 5.2(d); sections 2.4(b) and (e), 3.4(b) and (e), 4.4(b) and (e), 5.4; and Subpart 7 of this Part.

(d) Every carrier is subject to the provisions of sections 2.2(d)(4), 3.2(d)(4), 4.2(d)(4), 5.2(d); and sections 2.4(b) and (e), 3.4(b) and (e), 4.4(b) and (e), 5.4 of this Part. The carrier may also be subject to the provisions of Subpart 7 of this Part if the carrier is a discharger.

(e) Every contractor in a contractual relationship with the facility owner, tank system owner, or operator, and any other party and its contractors who have been retained as part of a business transaction relating to the facility, is subject to the provisions of sections 2.2(d)(4), 3.2(d)(4), 4.2(d)(4), 5.2(d); and sections 2.4(b) and (e), 3.4(b) and (e), 4.4(b) and (e), and 5.4 of this Part.

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

613-1.3 Definitions.

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

(b) *Accessible area* means an area – such as a room, basement, cellar, shaft, or vault – that allows for the physical inspection of the entire 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. This term does not include a dispenser system.

(d) *Carrier* means a person who transports petroleum to or from a tank system. Transporting petroleum does not include dispensing petroleum from a tank system.

(e) *Category 1* means any tank system component (e.g., tank, piping, ancillary equipment, fill port catch basins, containment sumps, secondary containment, etc.) installed before December 27, 1986.

(f) *Category 2* means any tank system component (e.g., tank, piping, ancillary equipment, fill port catch basins, containment sumps, secondary containment, etc.) installed from December 27, 1986 through October 11, 2015.

(g) *Category 3* means any tank system component (e.g., tank, piping, ancillary equipment, fill port catch basins, containment sumps, secondary containment, etc.) installed after October 11, 2015.

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

(i) *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, training 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.

(j) *Change-in-service* means switching the material stored within a tank system from a petroleum substance to a non-petroleum substance. This term is a form of permanent closure.

(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 Part. The Class A Operator typically manages resources and personnel to achieve and maintain compliance with the requirements of this Part.

(l) *Class B Operator* means the individual who has day-to-day responsibility for complying with applicable requirements of this Part. 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) *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.

(o) *Containment sump* means a liquid-tight container that protects the environment by containing leaks and spills of petroleum and petroleum mixtures from piping, dispensers, pumps, and related components in the containment area. Containment sumps may be located at the top of a tank (e.g., tank top sump, submersible turbine pump sump), underneath a

dispenser (*i.e.*, under-dispenser containment sump), or at other points in the piping run (*e.g.*, transition sump, intermediate sump).

(p) *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, training, 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 professional engineer (P.E.) licensed and registered in New York State (by the New York State Education Department under Title 8 of Article 145 of the Environmental Conservation Law, entitled “Engineering, Land Surveying, and Geology”), 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) an individual that is accredited or certified by NACE International as a corrosion specialist or cathodic protection specialist.

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

(r) *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 (*e.g.*, 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.

(s) *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 (*e.g.*, tank from piping).

(t) *Discovery*, for the purpose of spill reporting, means observing, directly or indirectly, or being informed of an observation.

(u) *Dispenser system* means equipment that is located aboveground, is attached to the tank system, and transfers petroleum to its point of use (*e.g.*, motor vehicles, fuel-burning equipment). This term 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) (1) *Facility* means a single property, or contiguous or adjacent properties used for a common purpose and owned or operated by the same person or persons, on or in which are located:

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

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

(2) This term does not include:

(i) any operational tank system;

(ii) any temporary tank system;

(iii) any tank system that is part of a pipeline 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 or systems are located on a property that has another tank system or set of tank systems that otherwise independently meets the definition of facility under subparagraph (1)(i) or (1)(ii) 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 subparagraph (1)(i) or (1)(ii) 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 2.6(b), 3.5(b), 4.5(b), or 5.6(b) of this Part;

(viii) pipelines that enter or leave the property; or

(ix) any wastewater treatment tank system which is:

(a) an AST system; or

(b) a UST system regulated under Section 307(b) or 402 of the Clean Water Act.

(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. This term includes fish hatcheries, rangeland, and nurseries with growing operations.

(aa) *Field-constructed tank* means a tank that is completely or primarily constructed on-site.

(ab) *Fill port catch basin* means a liquid-tight container that protects the environment by containing leaks and spills of petroleum and petroleum mixtures that occur during delivery (e.g., overfills, excess petroleum from the delivery hose).

(ac) *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. This term does 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.

(ad) *Free product* means petroleum that is present as a nonaqueous phase liquid (e.g., liquid that is not dissolved in water.)

(ae) *Gathering lines* means any pipeline, equipment, site, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

(af) (1) *Hazardous substance* means:

(i) a substance included on the list provided under section 597.3 of this Title;
or

(ii) a hazardous substance mixture.

(2) This term does not include petroleum as defined in subdivision (ba) of this section, except as may be part of a blend described in paragraph (ag)(2) of this section.

(ag) *Hazardous substance mixture* means a blend that consists of two or more substances and contains:

(1) one percent or more by volume of one or more substances covered under subparagraph (af)(1)(i) of this section (singly or in combination);

(2) less than 70 percent by volume of the substances covered under subparagraphs (ba)(1)(i) through (iii) of this section (singly or in combination); and

(3) no hazardous waste as identified or listed under Part 371 of this Title.

(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 burned solely for heating purposes. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces. This term does not include motor fuel used in a generator.

(ai) *Hydrant system* means a tank system which fuels aircraft, watercraft, or rail vehicles and operates under high pressure with large diameter piping that typically terminates into one or more hydrants (fill stands).

(aj) *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.

(ak) *In contact with the ground* means:

(1) for cathodic protection, on, partially, or fully beneath the surface of the ground, or covered by materials (which induce galvanic corrosion in tank system components); or

(2) for installation and leak detection, on, partially, or fully beneath the surface of the ground, or covered by materials. This definition does not apply to tank system components the exterior of which can be fully physically inspected, or to secondarily contained piping that are located completely aboveground.

(al) *Inaccessible area* means an area – such as a room, basement, cellar, shaft, or vault – that does not allow for the physical inspection of the exterior of the tank. This term does not include any room, basement, cellar, shaft, vault, etc. that is backfilled following tank installation.

(am) *Install or installation* means the emplacement of a tank system, or any part thereof, beneath, on, or above the ground. The movement of a tank from one location for use in a different location constitutes the installation of a tank system. Tank retrofits that create a new primary and/or secondary wall constitute a new tank installation.

(an) *Leak, spill, or spillage* means any escape of petroleum from the ordinary containment employed in the normal course of storage, transfer, processing, or use. Any escape of petroleum that enters containment equipment (e.g., catch basin, containment sump) is a spill.

(ao) *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.

(ap) *Lining* means a coating of noncorrodible epoxy-based resins (or an equivalent coating) that is bonded firmly to the interior surface of a tank and which is compatible with the petroleum stored, for the primary purpose of isolating the tank interior surface from the stored petroleum to prevent internal corrosion.

(aq) *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.

(ar) *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 less than 400,000 gallons is not a major facility for the purposes of this Part.

(as) *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.

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

(au) *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.

(av) *Operating day* means a calendar day that the facility received or dispensed petroleum.

(aw) *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.

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

(ay) *Overfill* means filling a tank beyond its design capacity.

(az) *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.

(ba) (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) This term does not include:

- (i) any hazardous substance covered under subdivision (af) of this section, except as may be part of a blend described in subdivision (bb) of this section;
- (ii) animal or vegetable oils; or
- (iii) substances that are gases at standard temperature and pressure.

(bb) *Petroleum mixture* means:

(1) a blend that consists of two or more substances that contains:

- (i) one percent or more by volume of one or more substances covered under subparagraphs (ba)(1)(i) through (iii) of this section (singly or in combination);
- (ii) less than one percent by volume of the substances covered under subparagraph (af)(1)(i) of this section (singly or in combination); and
- (iii) no hazardous waste as identified or listed under Part 371 of this Title; or

(2) a blend that consists of two or more substances that contains:

- (i) 70 percent or more by volume of the substances covered under subparagraphs (ba)(1)(i) through (iii) of this section (singly or in combination); and
- (ii) one or more other substances, except any hazardous waste as identified or listed under Part 371 of this Title.

(bc) *Pipe or piping* means a hollow cylinder or tubular conduit constructed of non-earthen materials that is used for the conveyance of petroleum.

(bd) *Primary containment* means any tank, piping or ancillary equipment which, under normal operating conditions, routinely contains petroleum.

(be) *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 that does not reach the environment, does not constitute a release.

(bf) *Repair* means to restore to working order a tank, pipe, fill port catch basin, overflow prevention equipment, corrosion protection equipment, leak detection equipment, or other tank system component that has either caused a leak or a suspected leak of petroleum from the tank system, or failed to function properly.

(bg) *Replaced* means:

(1) for piping, the removal of piping that is connected to a single tank and installation of other piping in its place. For tanks with multiple piping runs, this definition applies independently to each piping run; or

(2) for all other tank system components, the removal of a tank system component and installation of another of that tank system component in its place.

(bh) *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.

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

(bj) *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.

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

(bl) *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, while settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

(bm) *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.

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

(bo) *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.

(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 attached by the Department or its authorized representative to the fill port of a tank system giving notice that delivery is prohibited.

(bs) *Tank* means a stationary device designed to store petroleum that is constructed of non-earthen materials that provide structural support. Each compartment of a compartmented tank is treated as an individual tank that is part of the same tank system.

(bt) *Tank system* means the tank, all associated piping, ancillary equipment, fill port catch basins, containment sumps, secondary containment, and any other containment equipment. This term includes all tank compartments as well as interconnected tanks where petroleum can flow between the tanks. 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 that is installed and intended for use on a property for no more than 180 consecutive days during any 12-month period.

(bw) *Tightness test* means a test that is capable of detecting a leak from a tank system of 0.1 gallon per hour, unless expressly stated otherwise within in this Part, 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 has been trained and certified or credentialed by the manufacturer/vendor in the test method utilizing the testing equipment.

(bx) *Title 10* means Title 10 of Article 17 of the Environmental Conservation Law (ECL), entitled “Control of the Bulk Storage of Petroleum.”

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

(bz) *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 covered by materials (e.g., backfill, concrete encasement). This term does not include a tank system situated in an

accessible 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 or in an accessible area, and is:

- (1) fully enclosed within pre-fabricated secondary containment; or
- (2) insulated in order to store heated petroleum.

(ca) *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).

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

(cc) *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.

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

613-1.4 Access to records and facilities.

(a) Upon reasonable notice of 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 Part.

(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 Part, provided that the employee or agent is accompanied by the tank system owner, operator, or their designee.

613-1.5 Recordkeeping.

(a) Records must be maintained and made 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. Records may be in printed or electronic formats.

(b) In the case of permanent closure records required under sections 2.6(e), 3.5(e), 4.5(e), and 5.6 of this Part, a copy of the records must be submitted to the Department within 30 days after permanent closure.

(c) At a minimum, records must include a list of each tank system component/area checked, whether the equipment/area checked was acceptable or needed action taken, and a description of actions taken to correct an issue.

(d) The Commissioner of the Department may require a tank system owner or operator to submit evidence of financial assurance as described in subdivision 8.6(b) of this Part or other information relevant to compliance with Subpart 8 of this Part at any time.

613-1.6 Preemption.

(a) Except where the Department has approved a local law or ordinance under section 1.7 of this Subpart, any local law or ordinance that is aimed at establishing or implementing a petroleum bulk storage program, is preempted.

(b) The Department retains sole authority to administer and enforce this Part with respect to any public authority created under the Public Authorities Law, any State agency, any major facility, or any facility with a hydrant system.

613-1.7 Approval of local laws or ordinances.

(a) The Department may approve a local law or ordinance that establishes a local petroleum bulk storage program (local program) for a city with a population over one million or a county when such local law or ordinance provides environmental protection equal to or greater than:

- (1) the requirements of ECL article 17, title 10;
- (2) the applicable requirements of ECL article 71; and
- (3) the requirements of this Part, excluding Subpart 7 of this Part.

(b) The city or county must seek approval from the Department in writing. At a minimum, the application must:

- (1) include a copy of the local law or ordinance that establishes the local program;
- (2) explain differences and inconsistencies between the provisions of the local law or ordinance and the provisions of this Part and include a line-by-line comparison of the provisions of the local law or ordinance with the provisions of this Part;
- (3) identify enforcement procedures, penalties, and resources available to implement the local law or ordinance;

(4) contain a declaration of intent to administer and enforce the local law or ordinance; and

(5) contain a statement from the city or county attorney confirming that the city or county has adequate legal authority to carry out the local program. This statement should identify all sources of statutory authority that form the basis for the local program.

(c) *Conditions for Department approval.* In order to receive Department approval, a local law or ordinance that establishes a local program must, at a minimum, require that:

(1) every facility be inspected by the city or county at no less than three-year intervals; and

(2) inspection results, compliance determinations, and information regarding any enforcement action be made available to the Department.

(d) The Department will review every application and consult with the city or county and allow revisions to the initial application. The Department will issue a final written decision within 180 days after the initial application is submitted that either approves or disapproves the local law or ordinance. As part of the final written decision, the Department may approve the local law or ordinance and mandate adherence to conditions of approval that are additional to those set forth in subdivision (c) of this section. The finally approved version of the local law or ordinance along with any attendant conditions of approval will serve as the basis for the establishment of the local program to be implemented.

(e) Any modification to a previously approved local law or ordinance that establishes a local program that has not been newly approved by the Department under subdivision (d) of this section is without force or effect. Any attempt by a city or county to implement a modification to an approved local law or ordinance in the absence of Department approval of the modification is a ground for rescission of the Department's approval in accordance with subdivision (k) of this section.

(f) Every city or county administering an approved local program on October 17, 2023 may, within 180 days after October 17, 2023, request approval of a new or revised local law or ordinance that would establish a new or revised local program.

(g) The duration of the Department's approval of any local law or ordinance will not exceed five years.

(h) Every city or county administering an approved local program must, at least 180 days prior to the expiration of local program approval in accordance with subdivision (g) of this section:

(1) apply to the Department for renewal of the Department's approval of the existing local law or ordinance; or

(2) request approval of a new or revised local law or ordinance that would establish a new or revised local program.

(i) The Department's prior approval of a local program will remain in effect until the Department takes action under subdivision (d) or (k) of this section.

(j) *Department's continuing jurisdiction.* To the extent that the provisions of this Part are not inconsistent with the provisions of the approved local law or ordinance, the Department maintains its jurisdiction over every facility in any city or county having an approved local program. Every facility located in a city or county with an approved local program must be registered only with such city or county.

(k) *Rescission of approval of a local law or ordinance.*

(1) If a city or county administering an approved local program on October 17, 2023 does not apply for approval of a new or revised local law or ordinance in accordance with subdivision (f) of this section, the Department's approval is deemed rescinded.

(2) If the Department determines that an approved local law or ordinance is not being properly administered or enforced, it will advise the chief executive officer of the city or county of its determination in writing. If appropriate actions, as determined by the Department, are not taken by the city or county to effectively and properly administer and enforce the local law or ordinance within 60 days after receipt of the Department's written determination, the Department will rescind approval.

(3) The Department's decision to rescind approval of a local law or ordinance will take effect when it is published in the Environmental Notice Bulletin.

(4) The Department will solely administer the provisions of this Part for every facility located in a city or county for which approval of the local law or ordinance has been rescinded.

(5) Within 30 days after the Department's approval of the local law or ordinance has been rescinded, every facility located in the relevant city or county must submit to the Department an application to initially register the facility in accordance with paragraph 1.9(c)(1) of this Subpart. The registration application must include the applicable per-facility registration fee.

613-1.8 Variances.

(a) The Department may, upon written request from any person subject to this Part, grant a variance from one or more provisions of this Part. An application for a variance must:

(1) identify the specific provisions of this Part 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 the ECL;

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

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

(b) 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.

(c) No variance request will be approved that would have the effect of continuing an activity or circumstance that constitutes non-compliance with any provision of this Part, unless the Department authorizes the submission of the variance request as part of an enforcement settlement.

613-1.9 Registration.

(a) *General.*

(1) The facility owner must register the facility with the Department and obtain an initial or revised registration certificate prior to the first receipt of petroleum into a new or replaced tank system. For the purposes of registration, compartments of a compartmented tank system must be registered as separate tanks.

(2) The current registration certificate must be signed by the facility owner and displayed at all times in a conspicuous location at the facility.

(3) Registration must be renewed every five years after the date of the last valid registration certificate until the Department receives written notice and documentation from the facility owner that the facility has been permanently closed in accordance with the provisions of this Part, or that ownership of the facility has been transferred in accordance with paragraph (c)(3) of this section.

(4) The facility owner must ensure that the registration information identified in subparagraph (c)(4)(i) of this section remains current and accurate. In addition, every temporary tank system that is not removed within 180 days after installation must be included on the facility registration.

(5) The facility owner must submit all registration applications in accordance with the procedures in subdivision (c) of this section and using forms or electronic means provided by the Department. Forms are available online at www.dec.ny.gov and at all Department offices. The facility owner may rely on an authorized representative to satisfy any obligation imposed on the owner by the provisions of this section.

(b) *Transition from earlier regulation.* Unless the registration certificate must be revised or newly issued in accordance with the terms of subdivision (a) or (c) of this section, a registration certificate held by a facility on October 17, 2023 that was issued in accordance with terms of the previous Part 613 of this Title remains valid until the expiration date recorded on the certificate.

(c) *Registration application procedures.*

(1) *Initial registrations.*

(i) Each application for an initial registration 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.

(ii) Each application for an initial registration must be accompanied by payment of the applicable per-facility registration fee in Table 1:

Total Design Capacity of All Tanks at the Facility [gallons]	Fee Per Facility
>110 gallons to 1,100	\$0
>1,100 to 2,000	\$100
>2,000 to <5,000	\$300
5,000 to <400,000	\$500

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

(2) *Renewals.*

(i) Each application for a renewal must be accompanied by payment of the applicable per-facility registration fee in Table 1.

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

(3) *Transfers of ownership.*

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

(ii) Each application for a transfer of ownership registration 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.

(iii) Each application for a transfer of ownership registration must be accompanied by payment of the applicable per-facility registration fee in Table 1, regardless of the expiration date on the certificate held by the previous facility owner.

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

(4) *Information corrections.*

(i) Changes in the following registration items are examples of information corrections:

- (a) contact information;
- (b) tank system owner;
- (c) operator;
- (d) Class A or Class B operator;
- (e) tank system status (*e.g.*, the tank becoming out of service or returning to service);
- (f) tank system equipment; or
- (g) type of petroleum stored.

(ii) Within 30 days after any of the information identified in subparagraph (i) of this paragraph changes at the facility, the facility owner must submit an application to the Department reflecting the changes to keep the registration current and accurate.

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

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

(5) *Storing biofuel blends.* When a tank system is intended to store a biofuel blend containing either greater than ten percent ethanol or greater than 20 percent biodiesel, the facility owner must notify the Department at least 30 days prior to storing the biofuel blend.

(6) *Tank installation.*

(i) Except in the case of a temporary tank system, when a tank is intended for installation, the facility owner must notify the Department of this action at least 30 days prior to installing the tank using forms or electronic means provided by the Department. For any tank installed at a previously registered facility, any change in applicable fees will not be assessed until the registration is due for renewal.

(ii) Within 30 days after tank installation, the facility owner must submit an application to the Department indicating that the tank has been installed. The application must be signed by the facility owner.

(7) *Permanent closure.*

(i) When a tank system is going to be permanently closed, the facility owner must notify the Department of this action at least 30 days prior to the permanent closure (unless such action is in response to corrective action in accordance with Subpart 7 of this Part) using forms or electronic means provided by the Department. For any tank removed from a registered facility, any change in applicable fees will not be assessed until the registration is due for renewal.

(ii) Within 30 days after permanent closure, the facility owner must submit an application to the Department indicating that the tank system has been permanently closed. The application must be signed by the facility owner.

613-1.10 References.

The following technical standards are incorporated by reference. Except for the technical standards listed under subdivisions (b) and (i) of this section, these references are available for inspection and copying at the office of the Department's Division of Environmental Remediation, located at 625 Broadway, Albany, NY 12233 and the office of the Department of State, Division of Administrative Rules, located at One Commerce Plaza, 99 Washington Avenue, Suite 650, Albany, NY 12231. The technical standards listed under subdivisions (b) and (i) of this section are available for inspection at the office of the Department's Division of Environmental Remediation, located at 625 Broadway, Albany, NY 12233 and the office of the 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) 200 Washington Avenue NW, Washington, DC 20001-5571

(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 Identify Equipment, Vehicles, and Transfer Points for Petroleum Fuels and Related Products at Dispensing and Storage Facilities and Distribution Terminals*, 4th edition, April 2020.

(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) American Society for Testing and Materials (ASTM) 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

G158, *Standard Guide for Three Methods of Assessing Buried Steel Tanks*, 2016 edition.

(c) Association of Materials protection and Performance formerly NACE International (NACE) 15835 Park Ten Place, Houston, TX 77084

(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.

(d) Department of Defense (DoD) Washington, DC 22202

(1) Manual 4140.25, Volume 9, *DoD Management of Energy Commodities: Defense Fuel Support Point (DFSP) Bulk Petroleum Inventory Accounting*, March 2, 2018.

(2) Unified Facilities Criteria (UFC) 3-460-01, *Design: Petroleum Fuel Facilities*, 16 July 2019 with Change 2, January 12, 2022.

(e) Fiberglass Tank and Pipe Institute (FTPI) 8252 S. Harvard Avenue, Suite 1-2, Tulsa, OK 74137

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

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

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

(g) 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.

(h) 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.

(3) RP900, *Recommended Practices for the Inspection and Maintenance of UST Systems*, 2021 edition.

(4) RP1200, *Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities*, 2019 edition.

(5) RP1700, *Recommended Practices for the Closure of Underground Storage Tanks and Shop-Fabricated Aboveground Storage Tank Systems*, 2018 edition.

(i) 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.

(j) 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 1856, *Outline of Investigation for Underground Fuel Tank Internal Retrofit Systems*, June 2020 edition.

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

(k) Underwriters Laboratories of Canada (ULC) 7 Underwriters Road, Scarborough, Ontario, Canada M1R5P8

(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.

613-1.11 Use of equivalent technology.

(a) Where specified in this Part, the Department may approve the use of an equivalent technology, method, or practice by any person subject to this Part. A request to use equivalent technology must:

(1) identify the applicable provision of this Part; and

(2) include documentation, data, plans, specifications, and test results that demonstrate that the technology, method, or practice desired to be used will protect the public health, safety, and welfare, and the environment in a manner which equals or exceeds the requirements of the applicable provision of this Part.

(b) Where appropriate, a tank system component belonging to one Category is considered to be in compliance with the standards for said Category if the component conforms to the corresponding standards for a more stringent Category.

613-1.12 Tank system maintenance.

Tank system components must be maintained to be in good working order.

613-1.13 Enforcement.

(a) Any person who violates any of the provisions of this Part, any directive by the Department, or any order issued by the Department, shall be liable for the civil, administrative, and criminal penalties set forth in Article 71 of the Environmental Conservation Law (ECL).

(b) Where a spill of petroleum has occurred or is suspected, the Department may order the facility to inspect or test any tank system, location, and/or associated equipment which might be the source of the actual or suspected spill and to test for the tightness and structural soundness. If the facility fails to conduct such inspections and tests within ten 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.

(c) If the tank system owner or operator fails to comply with these regulations, the facility must, when directed by the Department, conduct a site assessment to determine if there is evidence of a release due to such noncompliance. This assessment must be conducted in accordance with the requirements of subdivision 2.6(c) of this Part and the results submitted to the Department within time frames to be determined by the Department.

613-1.14 Severability.

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

613-1.15 Future climate risk.

In addition to the requirements set forth in this Part, facilities must take into account the provisions of ECL section 17-1015 to comply with the provisions of this Part.

613-1.16 Financial responsibility.

Upon request by the Department, an owner and operator must provide evidence of financial responsibility for corrective action and for operating, maintaining, or closing tanks pursuant to this Part. Financial responsibility may be evidence by one or a combination of insurance, guarantee, surety bond, letter of credit, qualification as a self-insurer or other evidence acceptable to the Department.

Subpart 613-2 UST Systems Subject to both Subtitle I and Title 10

613-2.1 UST systems: design, construction, and equipment.

(a) *Applicability.*

(1) The provisions of this Subpart apply to UST systems that are part of a facility except for UST systems that are subject to Subpart 3 or 5 of this Part. Every UST system covered by this Subpart is subject to regulation pursuant to Subtitle I and Title 10.

(2) *Alternatives allowed.* UST systems with field-constructed tanks with a design capacity greater than 50,000 gallons that are subject to this Subpart may utilize the alternatives provided in subdivision (c) of this section and subdivisions 2.3(e) and (f) of this Subpart.

(3) *Partial exclusion.* Only the provisions of subdivision (d) of this section and Subpart 7 of this Part apply to wastewater treatment tank systems that are subject to this Part.

(b) *Design and equipment requirements for UST systems.* UST systems must meet the following requirements:

(1) *Tank requirements.*

(i) *Category 1 tank requirements.* Category 1 tanks must have been properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must have been protected from corrosion, in accordance with clause (a) of this subparagraph or met the requirements of clause (b) of this subparagraph.

(a) The tank met Category 2 or 3 tank requirements of subparagraph (ii) or (iii) of this paragraph.

(b) The tank met one of the following:

(1) *Internal lining.* Steel tanks must have been internally lined in accordance with API RP 1631, June 2001.

(2) *Cathodic protection.* Steel tanks must have been equipped with cathodic protection that met the requirements of subclauses (ii)(b)(4) and (5) of this paragraph, and the integrity of the tank must have been ensured using one of the following methods:

(i) The tank was internally inspected and assessed to ensure that the tank was structurally sound and free of corrosion holes prior to installing the cathodic protection system.

(ii) The tank had been installed for less than 10 years and is monitored weekly for leaks in accordance with one of the methods in listed under paragraphs 2.3(c)(4) through (9) of this Subpart.

(iii) The tank had been installed for less than 10 years and was assessed for corrosion holes by conducting two tightness tests in accordance with paragraph 2.3(c)(3) of this Subpart. The first tightness test must have been conducted prior to installation of the cathodic protection system. The second test must have been conducted between installation of the cathodic protection system and six months following its first operation.

(3) *Internal lining combined with cathodic protection.* Steel tanks must have been internally lined and equipped with cathodic protection. Tanks with both internal lining and cathodic protection must have met the following requirements:

(i) The internal lining was installed in accordance with subclause (1) of this clause.

(ii) The cathodic protection system met the requirements of subclauses (ii)(b)(4) and (5) of this paragraph.

(ii) *Category 2 tank requirements.* Category 2 tanks must have been properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must have been protected from corrosion, in accordance with clause (a), (b), or (c) of this subparagraph. Category 2 tanks in inaccessible areas must instead have met the requirements of clause (d) of this subparagraph. In addition, all tanks must have been secondarily contained in accordance with clause (e) of this subparagraph.

(a) *Fiberglass-reinforced plastic tanks.* Tanks made of fiberglass-reinforced plastic (FRP) must have been designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) UL 1316, July 1983;

(2) CAN4-S615-M83, 1983; or

(3) a code of practice listed under clause (iii)(a) of this paragraph.

(b) *Cathodically protected steel tanks.* Steel tanks must have been cathodically protected in accordance with the following:

(1) The tank was designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, April 1981;

(ii) ULC-S603-M1981, 1981; or

(iii) a code of practice listed under subclause (iii)(b)(1) of this paragraph.

(2) The tank was coated with a suitable dielectric material.

(3) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) API RP 1632, January 1983;

(ii) ULC-S603.1-M1982, 1982;

(iii) sti-P3®, July 1983; or

(iv) a code of practice listed under subclause (iii)(b)(3) of this paragraph.

(4) Field-installed cathodic protection systems were designed by a corrosion expert.

(5) Impressed current systems were designed to allow determination of current operating status as required under paragraph 2.2(i)(3) of this Subpart.

(c) *Clad or jacketed steel tanks.* Steel tanks must have been clad or jacketed with a noncorrodible material in accordance with the following:

(1) The tank was designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, April 1981;

(ii) ULC-S603-M1981, 1981; or

(iii) a code of practice listed under subclause (iii)(c)(1) of this paragraph.

(2) The tank was clad or jacketed with a noncorrodible material in accordance with either one of the codes of practice listed under subclause (iii)(c)(2) of this paragraph or the following:

(i) The tank was electrically insulated from the piping with dielectric fittings, bushings, washers, sleeves, or gaskets which are compatible with petroleum, petroleum additives, and corrosive soils.

(ii) The tank had an exterior fiberglass reinforced plastic shell bonded firmly to the steel. This must have consisted 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 have been applied to a thickness of 10 to 15 mils (0.01 to 0.015 inch). The thickness of the completed coating must have been a minimum of 100 mils (0.1 inch) after curing. The coating's coefficient of thermal expansion must have been 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 have been 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 noncorrodible under adverse underground electrolytic conditions and compatible with petroleum products and petroleum additives.

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

(d) *Tanks installed in inaccessible areas.* Tanks installed in an inaccessible area must have been designed and constructed in accordance with section 4.1(b)(1)(ii)(a) or (b) of this Part.

(e) *Secondary containment design.* Tanks must have been secondarily contained in accordance with the following:

(1) *Performance standards.* The tank secondary containment is able to:

(i) contain petroleum leaked from the primary containment until it is detected and remediated; and

(ii) prevent the release of petroleum.

(2) *Options for secondary containment.* The tank secondary containment consisted of one of the following:

(i) *Double-walled construction.* Double-walled tanks must have been designed and constructed in accordance with either one of the codes of practice listed under subclause (iii)(e)(2) of this paragraph or the following:

(A) The interstitial space of the double-walled tank can be monitored for tightness.

(B) Steel outer jackets had a minimum thickness of 10-gauge and were coated as required under subclause (b)(2) or item (c)(2)(ii) of this subparagraph.

(C) There were no penetrations of any kind through the jacket to the tank except top entry manholes and fittings required for filling, emptying, or venting the tank, or monitoring the interstitial space.

(D) The outer jacket covered at least the bottom 80 percent of the tank.

(E) The jacket was 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.

(ii) *Vaults.* Vaults must have been liquid-tight, compatible with the petroleum stored in the tank system, and able to withstand chemical deterioration and structural stresses from internal and external causes. The vault must have been a continuous structure with a chemical-resistant water stop used at any joint. There must have been no drain connections or other entries through the vault except for top entry manholes and other top openings required for filling, emptying, venting, and monitoring the tank, and pumping of any petroleum that leaks into the vault.

(iii) *Cut-off walls.* Cut-off walls must have met the following requirements:

(A) Cut-off walls were used only where groundwater levels are above the bottom of the tank excavation.

(B) Cut-off walls consisted of an impermeable barrier with a permeability rate to water equal to or less than 1×10^{-6} cm/s, which will not deteriorate in an underground environment and in the presence of petroleum.

(C) Cut-off walls extended around the perimeter of the excavation and to an elevation below the lowest groundwater level.

(D) If a synthetic membrane was used for a cut-off wall, any seams, punctures, or tears in the membrane must have been repaired in accordance with manufacturer's instructions and made liquid-tight prior to backfilling. No penetrations of the cut-off wall are allowed.

(E) If impervious native soil was used for a cut-off wall, the soil must have been continuous, of sufficient depth, thickness, and extent to contain a leak, and had a permeability rate to water equal to or less than 1×10^{-6} cm/s.

(iv) *Impervious underlayment.* Impervious underlayment must have met the following requirements:

(A) Impervious underlayment was used only under a tank where groundwater levels are below the bottom of the excavation and where soils are well drained. The underlayment had a permeability rate to water equal to or less than 1×10^{-6} cm/s and will not deteriorate in an underground environment and in the presence of petroleum. The underlayment may have consisted of impervious native soils, an impervious concrete pad, a synthetic membrane, or any equivalent material. If a synthetic membrane was used for impervious underlayment, any seams, punctures, or tears must have been repaired in accordance with manufacturer's instructions prior to backfilling.

(B) Impervious underlayment extended at least one foot beyond the sides and ends of the tank and had a slope of at least one-quarter inch per foot to a sump. An observation well was positioned in the sump and extended to the surface of the excavation for the purpose of sampling for leaks and pumping out water or petroleum which may accumulate.

(C) Surface waters are drained from the site using practices which may include capping the site with asphalt, concrete, or other impervious cover which is sloped to drainways leading away from the tank.

(iii) *Category 3 tank requirements.* Category 3 tanks must be properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must be protected from corrosion, in accordance with clause (a), (b), or (c) of this subparagraph. Category 3 tanks in inaccessible areas must instead meet the requirements of clause (d) of this subparagraph. In addition, all tanks must be secondarily contained in accordance with clause (e) of this subparagraph.

(a) *Fiberglass-reinforced plastic tanks.* Tanks made of fiberglass-reinforced plastic (FRP) must be designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) UL 1316, January 1994;

(2) ULC-S615-98, 1998;

(3) UL 1856, June 2020 (structural systems only); or

(4) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) *Cathodically protected steel tanks.* Steel tanks must be cathodically protected in accordance with the following:

(1) The tank is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, December 1996;

(ii) ULC-S603-00, 2000; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) The tank is coated with a suitable dielectric material.

(3) The cathodic protection system is designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) sti-P3®, September 2013;

(ii) UL 1746, January 2007;

(iii) ULC-S603.1-11, 2011;

(iv) NACE SP0285-2011, 2011; or

(v) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(4) Field-installed cathodic protection systems are designed by a corrosion expert.

(5) Impressed current systems are designed to allow determination of current operating status as required under paragraph 2.2(i)(3) of this Subpart.

(c) *Clad or jacketed steel tanks.* Steel tanks must be clad or jacketed with a noncorrodible material in accordance with the following:

(1) The tank is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, December 1996;

(ii) ULC-S603-00, 2000; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) The tank is clad or jacketed with a noncorrodible material that is designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 1746, January 2007;

(ii) STI F894, September 2013;

(iii) STI F961, September 2013;

(iv) STI F922, January 2013; or

(v) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(d) *Tanks installed in inaccessible areas.* Tanks installed in an inaccessible area must be designed and constructed in accordance with section 4.1(b)(1)(iii)(a) or (b) of this Part.

(e) *Secondary containment design.* Tanks must be secondarily contained in accordance with the following:

(1) *Performance standards.* The tank secondary containment is able to:

(i) contain petroleum leaked from the primary containment until it is detected and remediated; and

(ii) prevent the release of petroleum.

(2) Tanks designed and constructed in accordance with clause (a), (b), or (c) of this subparagraph are, at a minimum, double-walled and are also designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, December 1996;

(ii) UL 1316, January 1994;

(iii) UL 1746, January 2007;

(iv) UL 1856, June 2020 (structural systems only);

(v) STI F841, January 2006;

(vi) STI F922, January 2013; or

(vii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(3) Tanks installed in accordance with clause (d) of this subparagraph have secondary containment consisting of one of the following:

(i) *Double-walled construction.* Double-walled tanks must be designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(A) UL 142, December 2006;

(B) UL 80, September 2007;

(C) ULC-S601-07, 2007; or

(D) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) *Vaults.* Vaults must be liquid-tight, compatible with the petroleum stored in the tank system, 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 for top entry manholes and other top openings required for filling, emptying, venting, and monitoring the tank, and pumping of any petroleum that leaks into the vault.

(2) *Piping and ancillary equipment requirements.* The requirements of this paragraph apply to all piping and ancillary equipment that are in contact with the ground and routinely contains petroleum.

(i) *Category 1 requirements.* Category 1 piping and ancillary equipment must have been either upgraded to meet the requirements of clause (a) of this subparagraph by December 22, 1998, or removed.

(a) Piping and ancillary equipment made of metal must have been properly designed, constructed, and protected from corrosion, in accordance with the following requirements:

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

(2) Cathodic protection was provided using sacrificial anodes or impressed current.

(3) Monitors were installed and kept in proper working condition to check on the adequacy of the cathodic protection system. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the cathodic protection equipment must be repaired in accordance with subdivision 2.2(j) of this Subpart.

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

(5) Piping was designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(ii) *Category 2 requirements.* Category 2 piping must have been properly designed, constructed, and protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. Category 2 ancillary equipment must have been protected from corrosion in accordance with clause (b) of this subparagraph, as applicable.

(a) Piping made of a noncorrodible material must have either been designed and constructed in accordance with clause (iii)(a) of this paragraph or met the following requirements:

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

(2) Piping was designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(b) Piping and ancillary equipment made of metal must have either been designed and constructed in accordance with clause (iii)(b) of this paragraph or met the following requirements:

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

(2) Cathodic protection was provided using sacrificial anodes or impressed current.

(3) Monitors were installed and kept in proper working condition to check on the adequacy of the cathodic protection system. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the cathodic protection equipment must be repaired in accordance with subdivision 2.2(j) of this Subpart.

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

(5) Piping was designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(iii) *Category 3 requirements.* Category 3 piping must be properly designed, constructed, and protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. Category 3 ancillary equipment must be protected from corrosion in accordance with clause (b) of this subparagraph, as applicable. In addition, all piping and ancillary equipment (except for suction piping monitored for leaks in accordance with clause 2.3(b)(2)(ii)(d) of this Subpart) must be secondarily contained in accordance with clause (c) of this subparagraph.

(a) Piping made of a noncorrodible material must meet the following requirements:

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

(2) Piping is designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(3) Piping is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 971, February 2006;

(ii) ULC-S660-08, 2008; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Piping and ancillary equipment made of metal must meet the following requirements:

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

(2) Cathodic protection is provided using sacrificial anodes or impressed current.

(3) Monitors are installed and kept in proper working condition to check on the adequacy of the cathodic protection system. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the cathodic protection equipment must be repaired in accordance with subdivision 2.2(j) of this Subpart.

(4) Except where cathodic protection is provided by impressed current, piping and ancillary equipment have dielectric bushings, washers, sleeves, or gaskets

installed at the end to electrically isolate the piping and ancillary equipment from the tank and the dispenser. These dielectric connectors must be compatible with petroleum, petroleum additives, and corrosive soils.

(5) Piping is designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(6) Piping is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 971A, October 2006; or

(ii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(7) The piping or ancillary equipment is coated with a suitable dielectric material.

(8) The cathodic protection system is designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

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

(ii) STI R892, January 2006;

(iii) NACE SP0169-2013, 2013;

(iv) NACE SP0285-2011, 2011; or

(v) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(9) Field-installed cathodic protection systems are designed by a corrosion expert.

(10) Impressed current systems are designed to allow determination of current operating status as required under paragraph 2.2(i)(3) of this Subpart.

(c) Piping and ancillary equipment must be secondarily contained in accordance with the following:

(1) *Performance standards.* The secondary containment for piping and ancillary equipment is able to:

(i) contain petroleum leaked from the primary containment until it is detected and remediated; and

(ii) prevent the release of petroleum.

(2) Piping is, at a minimum, double-walled and designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 971, February 2006;

(ii) UL 971A, October 2006;

(iii) ULC-S660-08, 2008; or

(iv) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(3) *Overfill prevention.* Except as specified under subparagraph (iv) of this paragraph, tanks must be equipped with overfill prevention equipment that meets the following requirements:

(i) Overfill prevention equipment must do one of the following:

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

(b) alert the person responsible for transfer activities when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm (note: vent whistles cannot be used as high-level alarms);

(c) restrict flow 30 minutes prior to overfilling so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling;

(d) alert the person responsible for transfer activities with a high-level alarm one minute before overfilling so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling (note: vent whistles cannot be used as high-level alarms); or

(e) automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling.

(ii) The overfill prevention equipment must be appropriate for the type of delivery made to the UST system and all other tank system equipment installed.

(iii) Flow restrictors in vent lines may not be installed, and existing flow restrictors may not be repaired or replaced, to comply with the requirements of subparagraph (i) of this paragraph after October 13, 2015.

(iv) Overfill prevention equipment is not required if the UST system is filled by transfers of no more than 25 gallons at one time.

(4) *Fill port catch basins.* Except for UST systems filled by transfers of no more than 25 gallons at one time, UST systems must be equipped with a fill port catch basin at every fill port, that will prevent the release of petroleum when the transfer hose is detached from the fill pipe.

(5) *Dispenser systems.* UST systems must be equipped with under-dispenser containment for any new dispenser system that is installed.

(i) A dispenser system is considered new when both the dispenser and the equipment needed to connect the dispenser to the UST system are installed at a facility. The equipment necessary to connect the dispenser to the UST system includes check valves, shear valves, unburied risers or flexible connectors, or other transitional components that are beneath the dispenser and connect the dispenser to the piping.

(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 within it or be continuously electronically monitored for leaks from the dispenser system.

(6) *Valves.* UST systems must be equipped with valves described in this paragraph as applicable.

(i) *Shear valves.* Dispensers of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (*i.e.*, impact valve). Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 4-3.6. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 6.3.9.

(ii) *Solenoid or anti-siphon valves.* Piping and dispensers that are part of UST systems storing motor fuel and are at an elevation below the top of the tank, must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 2-1.7. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 4.2.4.

(iii) *Backflow check valves.* Delivery piping associated with a pump-filled tank must be equipped with a properly functioning check valve or equivalent device that provides automatic protection against backflow. Check valves are required only when the arrangement of the delivery piping is such that backflow from the receiving tank is possible.

(iv) *Operating valves.* Connections on a tank through which petroleum can normally flow and that have the potential to drain the tank via gravity, must be equipped with an operating valve to control the flow. Operating valves must be installed as close as practicable to the tank connection.

(7) *Compatibility.* Tank system equipment must be either made of or lined with materials that are compatible with the petroleum stored in the UST system.

(c) *Alternative requirements for UST systems with field-constructed tanks greater than 50,000 gallons.* UST systems with field-constructed tanks with a design capacity greater than 50,000 gallons may meet the following alternative requirements in lieu of the equivalent provisions under subdivision 2.1(b) of this section:

(1) *Tank requirements.*

(i) *Category 1 tank requirements.* Category 1 tanks must have been properly designed and constructed of metal, and any portion in contact with the ground and routinely contains petroleum must have been protected from corrosion, in accordance with clauses (a) through (d) of this subparagraph by October 13, 2018.

(a) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) NACE SP0285-2011, 2011;

(2) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Field-installed cathodic protection systems were designed by a corrosion expert; and

(c) Impressed current systems were designed to allow determination of current operating status as required under paragraph 2.2(i)(3) of this Subpart.

(d) Tanks greater than ten years old without cathodic protection were inspected and assessed to ensure that the tank was structurally sound and free of corrosion holes prior to installing the cathodic protection system. The assessment must have been performed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) ASTM G158, 1998; or

(2) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) *Category 2 tank requirements.* Category 2 tanks must have been properly designed and constructed of metal, and any portion in contact with the ground and routinely contains petroleum must have been protected from corrosion, in accordance with clauses (a) through (c) of this subparagraph by October 13, 2018. In addition, all tanks must have been secondarily contained in accordance with clause (b)(1)(ii)(e) of this section.

(a) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) NACE SP0285-2011, 2011;

(2) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Field-installed cathodic protection systems were designed by a corrosion expert.

(c) impressed current systems were designed to allow determination of current operating status as required under paragraph 2.2(i)(3) of this Subpart.

(iii) *Category 3 tank requirements.* Category 3 tanks must be properly designed, constructed, and secondarily contained, and any portion in contact with the ground and routinely contains petroleum must be protected from corrosion, in accordance with subparagraph (b)(1)(iii) of this section. Tanks may also be designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references), in lieu of the codes of practice listed under clause (b)(1)(iii)(a), subclause (b)(1)(iii)(b)(1), or subclause (b)(1)(iii)(c)(1) of this section:

(a) DoD UFC 3-460-01, 2018; or

(b) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) *Piping requirements.* The requirements of this paragraph apply to all piping that are in contact with the ground and routinely contain petroleum.

(i) *Category 1 piping requirements.* Category 1 piping must have either been constructed of metal, properly designed, constructed, and protected from corrosion, in accordance with clauses (a) through (c) of this subparagraph by October 13, 2018, or removed.

(a) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) NACE SP0169-2013, 2013; or

(2) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Field-installed cathodic protection systems were designed by a corrosion expert.

(c) Impressed current systems were designed to allow determination of current operating status as required under paragraph 2.2(i)(3) of this Subpart.

(ii) *Category 2 piping requirements.* Category 2 piping must have either been constructed of metal, properly designed, constructed, and protected from corrosion, in accordance with clauses (a) through (c) of this subparagraph by October 13, 2018, or removed.

(a) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) NACE SP0169-2013, 2013; or

(2) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Field-installed cathodic protection systems were designed by a corrosion expert.

(c) Impressed current systems were designed to allow determination of current operating status as required under paragraph 2.2(i)(3) of this Subpart.

(iii) *Category 3 piping requirements.* Except as described in clauses (a) and (b) of this subparagraph, Category 3 piping must be properly designed, constructed, and secondarily contained, and any portion in contact with the ground and routinely contains petroleum must be protected from corrosion, in accordance with subparagraph (b)(2)(iii) of this section.

(a) Piping may be designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references), in lieu of the codes of practice listed under subclause (b)(2)(iii)(a)(3) or (b)(2)(iii)(b)(6) of this section:

(1) DoD UFC 3-460-01, 2018; or

(2) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Piping is not required to meet the secondary containment requirements of clause (b)(2)(iii)(c) of this section.

(d) *Requirements for partially excluded UST systems.* Wastewater treatment tank systems whose installation commenced on or after May 8, 1985 must meet the following minimum requirements:

(1) *Prevention of releases.* UST systems must be designed and installed to prevent releases due to corrosion or structural failure until the UST system is permanently closed.

(2) *Cathodic protection.* UST systems must be protected against corrosion, constructed of either noncorrodible material or steel clad with a noncorrodible material, or designed in a manner to prevent a release.

(3) *Compatibility.* Tank system equipment must be either made of or lined with materials that are compatible with the petroleum stored in the UST system.

613-2.2 General installation, operation, and maintenance requirements.

(a) *Installation requirements.*

(1) *Category 1 requirements.* Reserved.

(2) *Category 2 requirements.* Category 2 tank system components must have met the following requirements:

(i) Tank system components were installed in accordance with the manufacturer's instructions and NFPA 30, 1984 edition.

(ii) Piping in contact with the ground was tightness tested in accordance with paragraph 2.3(d)(2) of this Subpart before being covered, enclosed, or placed in use.

(iii) Tank system joints were liquid-tight and air-tight.

(iv) Any damage to tank coatings was repaired in accordance with manufacturer's instructions prior to backfilling.

(3) *Category 3 requirements.* Category 3 tank system components must meet the following requirements:

(i) Tank system components are properly installed in accordance with the manufacturer's instructions and one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(a) API RP 1615, April 2011;

(b) PEI RP100, 2011 edition;

(c) NFPA 30 and 30A, 2012 editions; or

(d) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) Any damage to tank coatings is repaired in accordance with manufacturer's instructions prior to backfilling.

(iii) A signed statement by the installer certifying that the tank system component was installed in compliance with subparagraph (i) of this paragraph, and one of the following documents, must be submitted to the Department within 30 days of installation and retained for the life of the UST system:

(a) records the installer has been certified by the tank or piping manufacturers, as applicable;

(b) the completed manufacturer's installation checklist showing that the tank or piping segment was installed in accordance with the manufacturer's instructions; or

(c) records the tank or piping segment installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation.

(b) *As-built information records.* An accurate facility diagram that includes the following information must be maintained until the facility has been permanently closed:

(1) *Category 1 tank system components.* Reserved.

(2) *Category 2 tank system components.*

(i) the location of:

(a) each tank and its associated piping, including registration identification number;

(b) fill ports;

(c) dispensing equipment;

(d) check valves;

(e) transition sumps (if any);

(f) monitoring or recovery wells (if any); and

(ii) at least one visible reference point (e.g., facility structure), a frame of reference (e.g., north arrow), and scale of the drawing.

(3) *Category 3 tank system components.*

(i) the location of:

(a) each tank and its associated piping, including registration identification number;

(b) fill ports;

(c) dispensing equipment;

(d) check valves;

(e) transition sumps (if any);

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

(ii) at least one visible reference point (e.g., facility structure), a frame of reference (e.g., north arrow), and scale of the drawing; and

(iii) the following attributes:

(a) physical dimensions of each tank; and

(b) installation date for each Category 3 piping segment.

(c) *Compatibility with biofuel blends.*

(1) The operator and tank system owner must be able to demonstrate compatibility of every component of a UST system storing petroleum containing either greater than ten percent ethanol or greater than 20 percent biodiesel, using one of the following documents:

(i) a certification or listing of the tank system component by a nationally recognized, independent testing laboratory for use with the stored biofuel blend; or

(ii) a written statement of compatibility from the tank system component manufacturer. The manufacturer's statement must be in writing, indicate an affirmative statement of compatibility, and specify the range of biofuel blends with which the equipment or component is compatible.

(2) *Recordkeeping.* Records required by this subdivision must be maintained until the UST system is permanently closed in accordance with subdivision 2.6(b) of this Subpart.

(d) *Spill and overflow prevention.* Facilities must be protected against releases due to spilling or overflowing in accordance with the following requirements:

(1) Category 2 and 3 tanks must have a label at every fill port indicating the tank's registration identification number, design and working capacities, and type(s) of petroleum that can be stored in the UST system.

(2) Fill ports must be color coded in accordance with API RP 1637 (April 2020). If a UST system contains petroleum that does not have a corresponding API color code, the type of petroleum currently in the UST system must be identified (e.g., stenciled lettering) at or near the fill port. For any fill port connected to multiple tanks storing different types of petroleum, the types of petroleum in each of the UST systems must be identified (e.g., with a label or placard) near the fill port.

(3) Monitoring wells must be clearly identified (e.g., labeled as "monitoring well", color coded in accordance with API RP 1637 (April 2020)) to prevent the accidental delivery of petroleum and must be sealed or capped to prevent liquids from entering from the surface.

(4) *Delivery of petroleum to a UST system.*

(i) The operator, when on the premises or when in control of the delivery, is responsible for transfer activities. If the operator is not on the premises and is not in control of a delivery, the carrier is responsible for transfer activities. The requirements of subparagraphs (ii) through (viii) of this paragraph apply to the person responsible for the transfer activities. The operator or carrier must employ practices for preventing transfer spills, overfills, and releases.

(ii) One of the transfer procedures described in NFPA 385 (2012 edition) or API RP 1007 (March 2001) must be used to comply with the requirements of this paragraph. In circumstances of technical infeasibility, practices must be developed and employed to ensure that releases due to spilling or overfilling do not occur.

(iii) Immediately prior to a delivery, the operator/carrier must determine that the delivery will be made to the proper tank system, the tank has sufficient capacity to receive the volume of petroleum to be delivered, and all ancillary equipment are in the appropriate position to accept delivery. All couplings and other connections must be inspected to ensure that they are leak-free, undamaged, and fully functional. During and after the delivery, all couplings and other connections must be monitored for leaks.

(iv) Immediately prior to a delivery, fill port catch basins must be inspected to ensure that they are empty. No deliveries may be made to the UST system if the fill port catch basin contains water, petroleum, or debris.

(v) Brakes must be set and wheels chocked on all rail cars before and during the delivery.

(vi) When a truck, rail car, or container is connected to the delivery piping, caution signs must be in place to give warning to persons approaching from any potential direction. Signs must remain in place until operations are completed, all connections are removed, and outlets properly closed.

(vii) During the delivery, the operator/carrier must always supervise, monitor, and control the transfer to prevent overfilling and spilling. The operator/carrier must be trained in the proper transfer procedures and must take immediate action to stop the transfer of petroleum when the tank's working capacity has been reached, or if an equipment failure or emergency occurs.

(viii) Immediately after a delivery, fill port catch basins must be inspected to ensure that they are empty. The fill port catch basin may not be left containing water, petroleum, or debris.

(e) *Periodic inspection of overfill prevention equipment.* Overfill prevention equipment must be inspected to ensure that the equipment is operating properly and will prevent releases.

(1) Inspections of overfill prevention equipment must be conducted at least once every three years which, at a minimum, ensures that:

(i) the overfill prevention equipment is set to activate at the working capacity specified under paragraph 2.1(b)(3) of this Subpart; and

(ii) the overfill prevention equipment will activate when the tank is filled to its working capacity.

(2) Inspections must be conducted in accordance with one of the following (refer to section 1.10 of this Part for complete citation of references):

(i) manufacturer's instructions;

(ii) PEI RP1200, 2019 edition; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(3) *Recordkeeping.* Records required by this subdivision must be retained for three years or until the next inspection, whichever is later.

(f) *Periodic monitoring/testing of fill port catch basins and containment sumps used for interstitial monitoring of piping.* Fill port catch basins and containment sumps used for interstitial monitoring of piping must be monitored or tested to ensure that the equipment is operating properly and will prevent releases (*i.e.*, is liquid-tight).

(1) The integrity of fill port catch basins and containment sumps used for interstitial monitoring of piping must be documented by meeting one of the following:

(i) The equipment is, at a minimum, double-walled and the integrity of both walls is monitored: at installation and reinstallation; within 30 days after repair (of the equipment); and, thereafter, at a frequency not less than the frequency of the applicable walkthrough inspections required under subdivision (h) of this section. (If switching from integrity

monitoring to integrity testing, integrity testing must commence within 30 days after the equipment was last monitored, in accordance with subparagraph (ii) of this paragraph.)

(ii) The equipment is tested: at installation and reinstallation; within 30 days after repair (of the equipment); and, thereafter, at least once every three years. Vacuum, pressure, or liquid testing is performed in accordance with one of the following criteria (refer to section 1.10 of this Part for complete citation of references):

(a) requirements developed by the manufacturer (Note: this option may be used only if the manufacturer has developed such testing requirements);

(b) PEI RP1200, 2019 edition; or

(c) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) *Recordkeeping.* Records required by subparagraph (1)(ii) of this subdivision must be retained for three years or until the next test, whichever is later. For double-walled equipment not tested every three years, records indicating that the equipment is double-walled and the integrity of both walls is periodically monitored in accordance with subparagraph (1)(i) of this subdivision, must be retained for as long as the equipment is monitored plus an additional three years.

(g) *Periodic inspection/testing of leak detection equipment.*

(1) *Connectivity inspections for electronic equipment.* All electronic monitoring systems must be inspected for connectivity at 30-day intervals.

(2) *Operability inspections.*

(i) Leak detection equipment required under subdivision 2.3(b) of this Subpart must be operated and maintained, and inspected annually for operability, in accordance with one of the following:

(a) manufacturer's instructions;

(b) PEI RP1200, 2019 edition; or

(c) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) The inspection must, at a minimum, cover the following components and criteria as applicable:

(a) *Automatic tank gauge and other controllers.* Test alarm; verify system configuration; and test battery backup.

(b) *Probes and sensors.* Inspect for residual buildup; ensure floats move freely; ensure shaft is not damaged; ensure cables are free of kinks and breaks; and test alarm operability and communication with controller.

(c) *Automatic line leak detector.* Test operability to meet criteria in paragraph 2.3(d)(1) of this Subpart by simulating a leak.

(d) *Vacuum pumps and pressure gauges.* Ensure proper communication with sensors and controller.

(e) *Handheld electronic sampling equipment for groundwater and vapor monitoring.* Ensure operability.

(3) *Recordkeeping.* Records required by this subdivision must be retained for three years.

(h) *Periodic operation and maintenance walkthrough inspections.*

(1) *Walkthrough inspection practices.* One of the following types of walkthrough inspections must be performed to ensure proper operation and maintenance of UST systems:

(i) walkthrough inspections that, at a minimum, checks the following equipment at intervals specified below:

(a) every 30 days (note: fill port catch basins receiving deliveries less frequent than every 30 days may be inspected prior to each delivery):

(1) *Fill port catch basins.* Visually check for damage; remove liquid or debris; check for and remove obstructions in the delivery piping; check the fill cap to make sure it is securely on the delivery piping; and, for double-walled fill port catch basin with interstitial monitoring, check for a leak in the interstitial area.

(2) *Leak detection equipment.* Check to make sure that the leak detection equipment required under subdivision 2.3(b) of this Subpart is operating with no alarms or other unusual operating conditions present; and ensure records of leak detection testing are reviewed and current.

(b) annually:

(1) *Containment sumps.* Visually check for damage, leaks to the containment area, or releases; remove liquid (in contained sumps) or debris; and, for double-walled sumps with interstitial monitoring, check for a leak in the interstitial area.

(2) *Handheld leak detection equipment.* Check devices such as tank gauge sticks or groundwater bailers for operability and serviceability, if used for a leak detection method listed under subdivision 2.3(c) of this Subpart.

(ii) operation and maintenance walkthrough inspections conducted in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(a) PEI RP900, 2021; or

(b) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) *Recordkeeping.* Records required by this subdivision must be retained for three years. Records must also include delivery records if the fill port catch basin is checked less frequently than every 30 days due to infrequent deliveries.

(i) *Operation and maintenance of corrosion protection.* Metal tank system components must be protected from corrosion to prevent releases due to corrosion, until the UST system is permanently closed in accordance with subdivision 2.6(b) of this Subpart.

(1) Corrosion protection systems must be operated and maintained to continuously and adequately protect metal tank system components that are in contact with the ground and routinely contain petroleum.

(2) Cathodic protection systems must be tested for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(i) *Frequency.* Cathodic protection systems are tested within six months of the cathodic protection system's installation, reinstallation, or repair, and at yearly intervals thereafter.

(ii) *Inspection criteria.* One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) is used to determine that cathodic protection is adequate:

(a) NACE TM0101-2012, 2012;

(b) NACE TM0497-2012, 2012;

(c) STI R051, January 2006;

(d) NACE SP0285-2011, 2011; or

(e) NACE SP0169-2013, 2013.

(3) Impressed current systems must be inspected for proper operation every 60 days. The inspection does not need to be conducted by a qualified cathodic protection tester, but must indicate:

(i) the current rectifier readings (both voltage and amperage);

(ii) whether the current amperage reading is within 20 percent of the baseline amperage reading from the previous annual cathodic protection test;

(iii) whether the rectifier clock, if available, has been operated continuously;

(iv) whether the bonding cable connections are secure; and

(v) any issues found and the actions taken to address them.

(4) *Recordkeeping.* Records required by paragraphs (2) and (3) of this subdivision must be retained for three years.

(5) Within 10 years after lining installation and every 5 years thereafter, Category 1 tanks lined in accordance with subclause 2.1(b)(1)(i)(b)(1) or item 2.1(b)(1)(i)(b)(3)(i) of this Subpart must be internally inspected and found to be structurally sound, with the lining still performing in accordance with original design specifications. The lining inspection must be conducted in accordance with one of the codes of practice listed under subparagraphs (i) through (iii) of this paragraph. A report detailing the inspection results must be retained for five years. If the internal lining is no longer performing in accordance with original design specifications and cannot be repaired in accordance with subdivision (j) of this section, then the lined tank must be permanently closed in accordance with subdivision 2.6(b) of this Subpart.

(i) API RP 1631, June 2001;

(ii) KWA Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera, September 1999; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(j) *Repairs and modifications.*

(1) If the tank system or any component thereof is inadequate or not tight, or any inspection shows that continuation of an operation or practice will result in a leak, then:

(i) the operation or practice must be modified or discontinued immediately;

(ii) the tank system or tank system component must be immediately replaced;

or

(iii) the tank system must be immediately emptied and taken out of service in accordance with subdivision 2.6(a) of this Subpart before the necessary repairs and required subsequent testing are performed, unless the tank system is permanently closed in accordance with subdivision 2.6(b) of this Subpart.

(Examples which may indicate that a leak is imminent include: leaking valves, pumps, and pipe joints; inadequate gauges; tightness test failures; excessive thinning of the tank shell which would indicate structural weakness when the tank is filled; and malfunctioning pressure or temperature gauges.)

(2) If the tank system or any component thereof, or continuation of an operation or practice, is not in imminent danger of causing a leak, but an inspection shows that the tank system is malfunctioning or is in disrepair, and that a leak is likely or probable unless action is taken, then:

(i) the operation or practice must be modified or discontinued immediately;

(ii) the tank system or tank system component must be replaced within 90 days (unless a shorter time is deemed necessary by the Department); or

(iii) the tank system must be taken out of service in accordance with subdivision 2.6(a) of this Subpart before the necessary repairs and required subsequent testing are performed, unless the tank system is permanently closed in accordance with subdivision 2.6(b) of this Subpart.

(Examples of such equipment disrepair include: secondary containment dikes with erosion or rodent damage; deficiencies in coatings for preventing corrosion caused by exposure to the environment; malfunctioning leak detection equipment; and cathodic protection systems which fail to provide the necessary electric current to prevent corrosion.)

(3) Repairs must be permanent, equal to or more protective than the standards of original construction or manufacturer's specifications, and must be accompanied by a signed statement from the person who performed the repair, that the repaired tank system component meets this requirement.

(4) Repairs to a UST system must be properly conducted in accordance with one of the following codes of practice, as applicable (refer to section 1.10 of this Part 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;

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

(viii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(5) Repairs to fiberglass-reinforced plastic tanks must be conducted in accordance with one of the codes of practice in paragraph (4) of this subdivision, or may instead be made by the manufacturer's authorized representative in accordance with the manufacturer's specifications for such repair.

(6) Metal pipe sections and fittings from which petroleum has leaked as a result of corrosion or other damage must be replaced.

(7) Noncorrodible pipes and fittings from which petroleum has leaked or that have been damaged must be repaired or replaced.

(8) For a piping repair or replacement, a new piping run must be installed when 50 percent or more of the piping run is removed, unless the piping run meets the requirements of subparagraph 2.1(b)(2)(iii) of this Subpart.

(9) Within 30 days following the repair of overfill prevention equipment or fill port catch basins, the repaired equipment must be tested or inspected, as applicable, in accordance with subdivision (e) or (f) of this section to ensure proper operation.

(10) Within 30 days following the repair of secondary containment for tanks or piping, or containment sumps used for interstitial monitoring, the repaired equipment must be tested in accordance with the manufacturer's instructions, a code of practice listed under paragraph (4) of this subdivision, or subdivision 2.2(f) of this section, as applicable.

(11) Within 30 days following the repair of tanks and piping not covered in paragraph (10) of this subdivision, repaired tanks and piping must be tightness tested in accordance with paragraph 2.3(c)(3) and (d)(2) of this Subpart, respectively, with the exception of the following:

(i) tanks that are internally inspected in accordance with API RP 1631 (June 2001) following the repair;

(ii) Category 1 and Category 2 field-constructed tanks with a design capacity greater than 50,000 gallons that are tightness tested in accordance with paragraph 2.3(e)(1) of this Subpart following the repair;

(iii) piping that is associated with a field-constructed tank with a design capacity greater than 50,000 gallons, and is tightness tested in accordance with paragraph 2.3(f)(1) of this Subpart following the repair; and

(iv) tanks and piping that are monitored for leaks in accordance with a method listed under paragraph 2.3(c)(4) through (9), or (d)(3) of this Subpart, as applicable.

(12) Within six months following the repair of any tank system component that is cathodically protected, or any repair or reinstallation of a cathodic protection system, the cathodic protection system must be tested and inspected, as applicable, in accordance with paragraphs (i)(2) and (3) of this section to ensure proper operation.

(13) *Recordkeeping.*

(i) Records required by paragraphs (1) through (12) of this subdivision must be retained until the UST system is permanently closed in accordance with section 2.6(b) of this Subpart.

(ii) Written documentation of all repairs of leak detection equipment installed on-site must be retained for at least three years after the servicing work is completed.

(k) *UST systems in locations subject to flooding.*

(1) For Category 1 or 2 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water, safeguards must be maintained in accordance with section 2-5.6 of NFPA 30 (1984 edition). If such safeguards include ballasting of a tank 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 tank after the flood must not be discharged to the waters of the State unless the discharge is in conformance with the standards of Parts 701, 702, 703, and 750 of this Title, as applicable.

(2) For Category 3 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water from fire suppression operations, uplift protection must be provided in accordance with Sections 22.14 and 23.14 of NFPA 30 (2012 edition).

613-2.3 Leak detection.

(a) *General leak detection requirements.*

(1) A method, or combination of methods, of leak detection must be provided, that:

(i) can detect a leak from any portion of the tank and the piping that are in contact with the ground or are in inaccessible areas, and routinely contain petroleum;

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

(iii) meets the requirements of subdivisions (c) through (f) of this section, as applicable. In addition, the methods listed under paragraphs (c)(2), (3), (4), (8) and (9), (d)(1) through (3), (e)(1) through (5), and (f)(1) through (4) of this section must be capable of detecting the leak rate or quantity specified for that method with a probability of detection of 95 percent and a probability of false alarm of 5 percent.

(2) If a method of leak detection that complies with the requirements of this section cannot be implemented, the UST system must be permanently closed in accordance with subdivision 2.6(b) of this Subpart.

(3) If the petroleum stored will change such that the UST system would then be subject to new inspections and tests required under this section, these inspections and tests must be performed before the change occurs.

(b) Specific leak detection requirements for tanks and piping.

(1) *Tank leak detection.* Tanks must be monitored for leaks as follows:

(i) Category 1 tanks.

(a) Except for tanks described under clause (b) of this subparagraph, Category 1 tanks must be monitored for leaks at weekly intervals using one of the methods listed under paragraphs (c)(2), (4), (5), (6), (7), (8), and (9) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement. Additionally, inventory monitoring must be performed in accordance with paragraph (c)(1) of this section for tanks which store any amount of motor fuel or kerosene that will be sold as part of a commercial transaction.

(b) Alternative tank leak detection. Category 1 field-constructed tanks with a design capacity greater than 50,000 gallons must be monitored for leaks at weekly intervals using one of the methods listed under paragraphs (c)(4), (7), or (9) of this section, or using one or a combination of the alternative methods listed under subdivision (e) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(ii) Category 2 tanks.

(a) Except for tanks described under clause (b) of this subparagraph, Category 2 tanks must be monitored for leaks at weekly intervals in accordance with paragraph (c)(7) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement. Additionally, inventory monitoring must be performed in accordance with paragraph (c)(1) of this section for tanks which store any amount of motor fuel or kerosene that will be sold as part of a commercial transaction.

(b) Alternative tank leak detection. Category 2 field-constructed tanks with a design capacity greater than 50,000 gallons must be monitored for leaks at weekly intervals in accordance with paragraph (c)(7) of this section, or using one or a combination of the alternative methods listed under subdivision (e) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(iii) Category 3 tanks. Category 3 tanks must be monitored for leaks at weekly intervals in accordance with paragraph (c)(7) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement. Additionally, inventory monitoring must be

performed in accordance with paragraph (c)(1) of this section for tanks which store any amount of motor fuel or kerosene that will be sold as part of a commercial transaction.

(2) *Piping leak detection.* Except for piping described under subparagraph (iii) of this paragraph, piping that is in contact with the ground and routinely contains petroleum must be monitored for leaks as follows:

(i) *Pressurized piping.*

(a) *Category 1 piping.* Category 1 piping that conveys petroleum under pressure must:

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

(2) have an annual line tightness test performed in accordance with paragraph (d)(2) of this section; or

(3) be monitored for leaks at weekly intervals in accordance with paragraph (d)(3) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(b) *Category 2 piping.* Category 2 piping that conveys petroleum under pressure must:

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

(2) have an annual line tightness test performed in accordance with paragraph (d)(2) of this section; or

(3) be monitored for leaks at weekly intervals in accordance with paragraph (d)(3) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(c) *Category 3 piping.* Category 3 piping that conveys petroleum under pressure must be equipped with an automatic line leak detector that is operated in accordance with paragraph (d)(1) of this section, and be monitored for leaks at weekly intervals in accordance with paragraph (c)(7) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(ii) *Suction and gravity-fed piping.*

(a) *Category 1 piping.* Category 1 piping that conveys petroleum under suction must either have a line tightness test performed at least every three years in accordance with paragraph (d)(2) of this section, or be monitored for leaks at weekly intervals in accordance

with paragraph (d)(3) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(b) *Category 2 piping.* Category 2 piping that conveys petroleum under suction must either have a line tightness test performed at least every three years in accordance with paragraph (d)(2) of this section, or be monitored for leaks at weekly intervals in accordance with paragraph (d)(3) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(c) *Category 3 piping.* Category 3 piping that conveys petroleum under suction must be monitored for leaks at weekly intervals in accordance with paragraph (c)(7) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(d) No leak detection is required for suction piping that is demonstrated to be designed and constructed to meet the following standards:

(1) The piping operates at less than atmospheric pressure.

(2) The piping is sloped so that the contents of the pipe will drain back into the tank if the suction is released.

(3) Only one check valve is included in each suction line.

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

(iii) *Alternative piping leak detection.* Piping that is associated with a field-constructed tank with a design capacity greater than 50,000 gallons, must be monitored for leaks using one of the methods required under paragraph (c)(7), (d)(1), (d)(2), or (d)(3) of this section, as applicable, or using one or a combination of the alternative methods listed under subdivision (f) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(c) *Tank leak detection methods.* Tank leak detection methods used to meet the requirements of paragraph (b)(1) of this section must be conducted in accordance with the following:

(1) *Inventory monitoring.* Inventory monitoring must meet the following requirements:

(i) Volume measurements for petroleum delivered, dispensed, and the amount still remaining in the tank (or each interconnected set of tanks), are recorded each operating day.

(ii) 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.

(iii) The petroleum delivered is reconciled with delivery receipts by measurement of the volume before and after delivery.

(iv) Deliveries are made through a drop tube that extends to within one foot of the tank bottom.

(v) Petroleum dispensing is 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 tank is made to the nearest one-eighth of an inch and recorded each operating day.

(vii) Every operating day, the difference between the expected and actual amount of petroleum in the tank is calculated. At 10-day intervals, the sum of the daily differences is calculated and compared 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 tank has a recurring accumulation of water within the 10-day period; or

(b) the sum of the daily differences over the ten-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 listed under subparagraph (iv) of this paragraph, during which no petroleum is added to or removed from the tank.

(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 2.4 of this Subpart if the variation between beginning and ending measurements exceeds the weekly or monthly standards in Table 2:

Table 2: Manual Tank Gauging

Tank Design Capacity [gallons]	Minimum Test Duration [hours]	Weekly Standard (One Test) [gallons]	Monthly Standard (Four-Test Average) [gallons]
≤550	36	10	5
551 to 1,000 (tank diameter = 64")	44	9	4
551 to 1,000 (tank diameter = 48")	58	12	6

(v) Tanks with a design capacity equal to or less than 550 gallons, and tanks with a design capacity from 551 to 1,000 gallons that meet the tank diameter criteria in Table 2, may use this as the sole method of leak detection. Tanks with a design capacity greater than 1,000 gallons may not use this method to meet the requirements of this Subpart.

(3) *Tank tightness testing.*

(i) 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 tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(ii) *Qualifications of test technicians.* 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.

(4) *Automatic tank gauging.* Automatic tank gauging equipment 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 gallons per hour from any portion of the tank that routinely contains petroleum.

(ii) The automatic tank gauging equipment must meet the inventory monitoring requirements of paragraph (1) of this subdivision, as applicable. (Note: the use of automatic tank gauging equipment does not require inventory monitoring, but the automatic tank gauging equipment must be capable of acquiring tank volume measurements, including tank-bottom water measurements, to the same standards required for inventory monitoring.)

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

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

(b) continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the equipment to gather incremental measurements to determine the leak status of the tank 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 (e.g., 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 (e.g., 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 tank.

(iii) The measurement of vapors by the monitoring device is not rendered inoperative by groundwater, rainfall, 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 tank.

(v) Vapor monitors are designed and operated to detect any significant increase in concentration above background levels 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 tank excavation zone, the site is assessed to ensure compliance with the requirements of subparagraphs (i) through (iv) of this paragraph and to establish the number and positioning of monitoring wells or devices that will detect leaks within the excavation zone from any portion of the tank that routinely contains petroleum. Assessments developed after October 13, 2015 must be signed by a professional engineer or professional geologist licensed and registered in New York State (by the New York State Education Department under Title 8 of Article 145 of the Environmental Conservation Law, entitled "Engineering, Land Surveying, and Geology").

(vii) Monitoring wells are clearly marked in accordance with paragraph 2.2(d)(3) of this Subpart 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/s (e.g., 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 is 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 are 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 of 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 tank that routinely contains petroleum. Assessments developed after October 13, 2015 must be signed by a professional engineer or professional geologist licensed and registered in New York State (by the New York State Education Department under Title 8 of Article 145 of the Environmental Conservation Law, entitled "Engineering, Land Surveying, and Geology").

(viii) Monitoring wells are clearly marked in accordance with paragraph 2.2(d)(3) of this Subpart and secured to avoid unauthorized access and tampering.

(7) *Interstitial monitoring.* Interstitial monitoring between the primary and secondary containment may be used if the monitoring equipment is designed, constructed, and installed to detect a leak from any portion of the tank that routinely contains petroleum, and if the monitoring equipment meets the requirements of either subparagraph (i), (ii), or (iii) of this paragraph:

(i) For a double-walled tank, the sampling or testing method:

(a) can detect a leak through the inner wall in any portion of the tank that routinely contains petroleum; and

(b) is capable of detecting a breach in both the inner and outer walls of the tank if using continuous vacuum, pressure, or liquid-filled methods of interstitial monitoring.

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

(a) The secondary containment consists of artificially constructed material that is sufficiently thick and impermeable (*i.e.*, with a permeability rate to water equal to or less than 1×10^{-6} cm/s) to direct a leak to the monitoring point and permit its detection.

(b) The secondary containment is compatible with the petroleum stored so that a leak from the UST system will not cause a deterioration of the secondary containment, allowing a leak to pass through undetected.

(c) For cathodically protected tanks, the secondary containment is 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 inoperative so that a leak could go undetected for more than seven days.

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

(f) Monitoring wells are clearly marked in accordance with paragraph 2.2(d)(3) of this Subpart and secured to avoid unauthorized access and tampering.

(iii) UST systems installed in a vault that allows for monitoring of the vault space, must meet the requirements of clauses (ii)(a) through (c) of this paragraph.

(8) *Statistical inventory reconciliation.* Statistically based testing or monitoring methods must:

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

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

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

(9) *Other methods.* Another leak detection method, or combination of methods, may be used if:

(i) it can detect a leak at the rate of 0.2 gallons per hour with a probability of detection of 95 percent and a probability of false alarm of 5 percent, and the method is demonstrated to detect a leak as effectively as any of the methods allowed under paragraphs (4) through (8) of this subdivision; and

(ii) the Department approves the method. If the Department approves the method, all conditions imposed by the Department must be met.

(d) *Piping leak detection methods.* Piping leak detection methods used to meet the requirements of paragraph (b)(2) of this section must be conducted in accordance with the following:

(1) *Automatic line leak detectors.* Methods which indicate 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) Line tightness testing must be capable of detecting a leak at the rate of 0.1 gallon per hour at one and one-half times the operating pressure.

(ii) *Qualifications of test technicians.* 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.

(3) *Other methods.* The methods listed under paragraphs (c)(5) through (9) of this section may be used if they are designed to detect a leak from any portion of the piping that routinely contains petroleum.

(e) *Alternative leak detection methods for field-constructed tanks with a design capacity greater than 50,000 gallons.* Tank leak detection methods used to meet the requirements of clause (b)(1)(i)(b) or (ii)(b) of this section must be conducted in accordance with the following:

(1) *Annual tightness testing.* Annual tank tightness testing must be performed in accordance with subparagraph (c)(3)(ii) of this section and be capable of detecting a leak at the rate of 0.5 gallon per hour from any portion of the tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(2) *Automatic tank gauging in combination with tank tightness testing.* Automatic tank gauging in combination with tank tightness testing must be conducted in accordance with one of the following:

(i) Automatic tank gauging is performed at weekly intervals in accordance with subparagraphs (c)(4)(ii) and (iii) of this section and is capable of detecting a leak at the rate of one gallon per hour from any portion of the tank that routinely contains petroleum. In addition, tank tightness testing is performed at least every three years in accordance with subparagraphs (c)(3)(ii) of this section and is capable of detecting a leak at the rate of 0.2 gallons per hour from any portion of the tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(ii) Automatic tank gauging is performed at weekly intervals in accordance with subparagraphs (c)(4)(ii) and (iii) of this section and is capable of detecting a leak at the rate of two gallons per hour from any portion of the tank that routinely contains petroleum. In addition, tank tightness testing is performed at least every two years in accordance with subparagraphs (c)(3)(ii) of this section and is capable of detecting a leak at the rate of 0.2 gallons per hour from any portion of the tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(3) *Vapor monitoring using tracer compound.* Vapor monitoring must be performed annually in accordance with paragraph (c)(5) of this section using a tracer compound placed in the UST system and must be capable of detecting a leak at the rate of 0.1 gallons per hour.

(4) *Inventory control in combination with tank tightness testing, vapor monitoring, or groundwater monitoring.* Inventory control in combination with tank tightness testing, vapor monitoring, or groundwater monitoring must be conducted in accordance with the following:

(i) Inventory control is conducted at least every 30 days in accordance with one of the following standards (refer to section 1.10 of this Part for complete citation of references):

(a) Department of Defense Manual 4140.25; or

(b) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) Inventory control is capable of detecting a leak at the rate of 0.5 percent or less of flow-through.

(iii) Inventory control is combined with one of the following leak detection methods:

(a) *Tank tightness testing.* Tank tightness testing is performed annually in accordance with subparagraph (c)(3)(ii) of this section and is capable of detecting a leak at the rate of 0.5 gallon per hour from any portion of the tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(b) *Vapor or groundwater monitoring.* Vapor or groundwater monitoring is performed at weekly intervals in accordance with paragraph (c)(5) or (6), respectively, of this section.

(5) *Other methods.* Another leak detection method, or combination of methods, may be used if:

(i) the method is demonstrated to detect a leak as effectively as any of the methods allowed under paragraphs (1) through (4) of this subdivision; and

(ii) the Department approves the method. If the Department approves the method, all conditions imposed by the Department must be met.

(f) *Alternative leak detection methods for piping associated with field-constructed tanks with a design capacity greater than 50,000 gallons or airport hydrant systems.* Piping leak detection methods used to meet the requirements of subparagraph (b)(2)(iii) of this section must be conducted in accordance with the following:

(1) *Bulk piping tightness testing.* Line tightness testing must be performed in accordance with the following:

(i) Line tightness testing is performed semiannually or annually in accordance with subparagraph (d)(2)(ii) of this section.

(ii) Line tightness testing is capable of detecting a leak at the rates in Table 3, at or above the operating pressure:

Piping Segment Volume [gallons]	Semiannual Test [gallons per hour]	Annual Test [gallons per hour]
<50,000	1.0	0.5
≥50,000 to <75,000	1.5	0.75
≥75,000 to <100,000	2.0	1.0
≥100,000	3.0	1.5

(iii) Piping segment volumes ≥100,000 gallons not capable of meeting the maximum 3.0 gallons per hour leak rate (for semiannual testing) may instead be tested at a leak rate up to 6.0 gallons per hour in accordance with the schedule in Table 4:

Test	Due Date	Maximum Leak Detection Rate [gallons per hour]
First test	Not later than October 13, 2018	6.0
Second test	Between October 13, 2018 and October 13, 2021	6.0
Third test	Between October 13, 2021 and October 13, 2022	3.0
Subsequent tests	After October 13, 2022	3.0 (Semiannual Test) or 1.5 (Annual Test) per Table 3

(2) *Vapor monitoring using tracer compound.* Vapor monitoring must be performed annually in accordance with paragraph (c)(5) of this section using a tracer compound placed in the UST system and must be capable of detecting a leak at the rate of 0.1 gallons per hour.

(3) *Inventory control in combination with bulk piping tightness testing, vapor monitoring, or groundwater monitoring.* Inventory control in combination with bulk piping tightness testing, vapor monitoring, or groundwater monitoring must be conducted in accordance with the following:

(i) Inventory control is conducted at least every 30 days in accordance with one of the following standards (refer to section 1.10 of this Part for complete citation of references):

(a) Department of Defense Manual 4140.25; or

(b) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) Inventory control is capable of detecting a leak at the rate of 0.5 percent or less of flow-through.

(iii) Inventory control is combined with one of the following leak detection methods:

(a) *Bulk piping tightness testing.* Bulk piping tightness testing is performed in accordance with paragraph (1) of this subdivision and is capable of detecting a leak at the rates for semiannual testing in Table 3; or

(b) *Vapor or groundwater monitoring.* Vapor or groundwater monitoring is performed at weekly intervals in accordance with paragraph (c)(5) or (6), respectively, of this section.

(4) *Other methods.* Another leak detection method, or combination of methods, may be used if:

(i) the method is demonstrated to detect a leak as effectively as any of the methods allowed under paragraphs (1) through (3) of this subdivision; and

(ii) the Department approves the method. If the Department approves the method, all conditions imposed by the Department must be met.

(g) *Recordkeeping.* Records required by this section must meet the following requirements:

(1) The results or records of any sampling, testing, or monitoring must be retained for at least three years.

(2) The results of tightness testing must be retained for three years or until the next test, whichever is later, and include the following information:

(i) facility registration number;

(ii) tank identification number used on the application form required under section 1.9 of this Part for the tank or piping tested;

(iii) date of test;

(iv) results of test;

(v) test method;

(vi) certification by the technician that the test complies with subparagraph (c)(3)(i), subparagraph (d)(2)(i), paragraph (e)(1), clause (e)(4)(iii)(a), subparagraph (f)(1)(ii) or (iii), or clause (f)(3)(iii)(a) of this section;

(vii) statement of technician's qualifications;

(viii) address of technician; and

(ix) signature of technician.

(3) A copy of the results of tightness testing must be submitted to the Department within 30 days after performance of the test(s).

(4) Site assessment reports required under subparagraph 2.3(c)(5)(vi) or (6)(vii) of this section must be retained for as long as vapor or groundwater monitoring is used to satisfy the requirements of this Subpart.

(5) Written performance claims pertaining to any leak detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, must be retained for five years after the date of equipment installation.

(6) Written documentation of all calibration, maintenance, and repairs of leak detection equipment installed on-site must be retained for at least three years after the servicing work is completed. Schedules of required calibration and maintenance provided by the leak detection equipment manufacturer must be retained for five years after the date of equipment installation.

613-2.4 Reporting, investigation, and confirmation.

(a) *Reporting responsibilities.* The reporting requirements of subdivisions (b) and (e) of this section apply to the following persons:

(1) the facility owner;

(2) the tank system owner;

(3) the operator;

(4) the carrier;

(5) any contractor in a contractual relationship with the facility owner, tank system owner, or operator;

(6) any other party and its contractors who have been retained as part of a business transaction relating to the facility;

(7) any person who causes a spill at the facility.

(b) Reporting of suspected leaks.

(1) Suspected leaks must be reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and the procedures in subdivision (d) of this section must be followed for any of the following conditions:

(i) the discovery of petroleum outside of a UST system at the facility or in the surrounding area (*e.g.*, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water);

(ii) unusual operating conditions observed (*e.g.*, the erratic behavior of petroleum-dispensing equipment, the sudden loss of petroleum from the UST system, an unexplained presence of water in the tank, or water in the interstitial space of secondarily contained tank system components), unless the tank system component is found to be defective but not leaking, and is immediately repaired or replaced;

(iii) monitoring/testing results, including alarms, from a leak detection method required under subdivisions 2.3(a) and (b) of this Subpart (except for inventory monitoring under paragraph 2.3(c)(1) of this Subpart) which indicate that a leak may have occurred, unless:

(a) the monitoring device is found to be defective, and is immediately repaired, recalibrated, or replaced, and additional monitoring does not confirm the initial result; or

(b) the alarm was investigated and determined to be a non-spill event (*e.g.*, from a power surge or caused by filling the tank during leak detection testing);

(iv) testing/monitoring results from periodic testing/monitoring required under paragraph 2.2(f)(1) of this Subpart, for a fill port catch basin, containment sump, or any other containment equipment, indicate that the containment equipment does not have integrity.

(2) If results from inventory monitoring indicate that a leak may have occurred, the suspected leak must be reported to the Department's Spill Hotline (800-457-7362) within 48 hours after determining the results, and the procedures in subdivision (d) of this section must be followed, unless the results can be explained by inaccurate recordkeeping, temperature variations, or other factors not related to leaks. Records explaining why the results from inventory monitoring do not indicate that a leak occurred must be retained for three years.

(3) When a leak is suspected, or where inspections or tests required by this Part have not been performed, or where accurate inventory monitoring records are not kept and reconciled as required under paragraph 2.3(c)(1) of this Part, 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 ten 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.

(c) *Investigation due to off-site impacts.* When required by the Department, the procedures in subdivision (d) of this section must be followed to determine if the UST system is the source of off-site impacts. These impacts include the discovery of petroleum (e.g., the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking waters) that has been observed by the Department or brought to its attention by another party.

(d) *Leak investigation and confirmation steps.* Unless corrective action is initiated in accordance with Subpart 7 of this Part, any leak or suspected leak of petroleum must be investigated using either one of the methods described in paragraph (1) or (2) of this subdivision or another procedure approved by the Department. The investigation must commence immediately following the reporting required under subdivision (b) or (e) of this section. The investigation must be completed, and the results submitted to the Department prior to any repairs and within seven days after the reporting required under subdivision (b) or (e) of this section.

(1) *System test.* Testing must be conducted in accordance with paragraph 2.2(f)(1), 2.3(c)(3), or 2.3(d)(2) of this Subpart to determine: whether a leak exists in the portion of the UST system (including delivery piping) suspected of leaking; and, in the case of petroleum reaching secondary containment, if a breach of the secondary containment occurred.

(i) If the test results indicate that a leak or release has occurred, the leaking UST system must be immediately emptied to prevent further leaks and be:

(a) promptly taken out of service in accordance with subdivision 2.6(a) of this Subpart and repaired in accordance with subdivision 2.2(j) of this Subpart;

(b) replaced; or

(c) permanently closed in accordance with subdivision 2.6(b) of this Subpart.

(ii) If the test results indicate that a release has occurred, corrective action must also begin in accordance with Subpart 7 of this Part.

(iii) If the test results do not indicate that a leak exists but environmental contamination is the basis for suspecting a leak, a site check must be conducted in accordance with paragraph (2) of this subdivision.

(iv) If the test results do not indicate that a leak exists and environmental contamination is not the basis for suspecting a leak, further investigation is not required.

(2) *Site check.* The presence or absence of a release must be measured where contamination is most likely to be present at the facility (i.e., in the excavation zone or at the

UST system location). In selecting sample types, sample locations, and measurement methods, the following must also be considered: nature of the type(s) of petroleum previously stored in the UST system; type of initial alarm or cause for suspicion; type of backfill; depth of groundwater; and other factors appropriate for identifying the presence and source of the release.

(i) If the site check results indicate that a release has occurred, corrective action must begin in accordance with Subpart 7 of this Part.

(ii) If the site check results do not indicate that a release has occurred, further investigation is not required.

(e) *Response to spills.*

(1) Releases must be reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and corrective action must begin in accordance with Subpart 7 of this Part.

(2) Spills must be contained and reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and the procedures in subdivision (d) of this section must be followed, unless the spill meets all of the following conditions:

(i) The spill is known to be less than five gallons in total volume.

(ii) It is contained and under the control of the spiller.

(iii) It has not reached and will not reach the lands or waters of the State.

(iv) It is cleaned up within two hours after discovery.

(v) The component of the UST system (including delivery piping) that leaked is promptly repaired in accordance with subdivision 2.2(j) of this Subpart or replaced.

(3) Leaking UST systems must be immediately emptied to prevent further leaks and be:

(i) promptly taken out of service in accordance with subdivision 2.6(a) of this Subpart and repaired in accordance with subdivision 2.2(j) of this Subpart;

(ii) replaced; or

(iii) permanently closed in accordance with subdivision 2.6(b) of this Subpart.

613-2.5 Operator training.

(a) *Designation of operators.* The following Class A, Class B, and Class C Operators who meet the requirements of this section must be designated:

(1) one Class A and one Class B Operator for each UST system or group of UST systems (the same individual may be designated for multiple Operator classes and tank systems); and

(2) every individual who meets the definition of Class C Operator at the facility as a Class C Operator. At least one Class C Operator must be designated for each UST system (the same individual may be designated as the Class C Operator for multiple tank systems).

(b) *Requirements for operator testing.* Class A, Class B, and Class C Operators must meet the requirements of this subdivision. Any individual designated for more than one Operator class must pass the required exam for each Operator class in which the individual is designated.

(1) *Class A Operators.* Class A Operators must pass an exam offered by the Department that measures knowledge of the purpose, methods, and function of the requirements of this Part concerning:

- (i) spill and overfill prevention;
- (ii) leak detection;
- (iii) corrosion protection;
- (iv) emergency response;
- (v) compatibility;
- (vi) financial responsibility;
- (vii) registration;
- (viii) out-of-service status and permanent closure;
- (ix) related reporting, recordkeeping, testing, and inspections;
- (x) environmental and regulatory consequences of releases; and
- (xi) knowledge and training requirements for Class B and Class C Operators, respectively.

(2) *Class B Operators.* Class B Operators must pass an exam offered by the Department that measures knowledge of the purpose, methods, and function of the requirements of this Part concerning:

- (i) operation and maintenance;

- (ii) spill and overfill prevention;
- (iii) leak detection and related reporting;
- (iv) corrosion protection and related testing;
- (v) emergency response;
- (vi) compatibility;
- (vii) related reporting, recordkeeping, testing, and inspections;
- (viii) environmental and regulatory consequences of releases; and
- (ix) training requirements for Class C Operators.

(3) *Class C Operators.* Class C Operators must be trained and tested under the direction of a Class A or Class B Operator to take appropriate actions in response to emergencies and alarms indicating spills or releases (including reporting leaks, suspected leaks, or releases to the Department in accordance with section 2.4 of this Subpart) at the facility.

(c) *Timing of operator testing and training.*

(1) Class A and Class B Operators must meet the requirements of paragraphs (b)(1) and (2) of this section, respectively, before being designated.

(2) Class C Operators must meet the requirements of paragraph (b)(3) of this section before being designated.

(3) In the event that a Class A and/or Class B Operator is no longer the designated Operator (due to separation from employment, death, or other circumstance), a new Class A and/or B Operator must be designated within 30 days after the event.

(4) *Periodic retesting.* Class A and Class B Operators who possess a current and valid operator training credential must pass the Department's exam within the later of the following: two years after October 17, 2023, or five years after the date of the last valid Operator authorization certificate. Thereafter, they must be retested every five years after the date of the last valid Operator authorization certificate until the Department receives written notice and documentation that the individual either is no longer the designated Operator or inactivates their authorization.

(d) *Retesting due to significant non-compliance.* Class A or Class B Operators designated for UST systems that are determined by the Department to be in significant non-compliance must be retested in accordance with subdivision (b) of this section. Any reliance on previously obtained operator training credentials issued by another state will not be accepted by the Department. Class A or Class B Operators must be retested within 30 days after the date the

Department determines that a UST system is in significant non-compliance. Alternatively, a different Class A or Class B Operator may be designated, as appropriate, for the UST systems determined by the Department to be in significant non-compliance.

(e) *Recordkeeping*. Records required by this section must be retained for as long as the Operator remains designated at the facility plus an additional three years, and must consist of the following:

(1) authorization certificates issued by the Department upon successful completion of the Operator training exam for all Class A and Class B Operators; and

(2) training logs for all Class C Operators, that include the following:

(i) the name of the Class C Operator;

(ii) the date the Class C Operator was trained;

(iii) the name and authorization number of the Class A and/or Class B Operator under whose direction the Class C Operator was trained and tested; and

(iv) a signed statement from the Class A and/or Class B Operator under whose direction the Class C Operator was trained and tested, acknowledging that the Class C Operator was trained to take appropriate actions at the facility in response to emergencies and alarms indicating spills or releases.

613-2.6 Out-of-service UST systems and closure.

(a) *Out-of-service UST systems*.

(1) A UST system is out of service if:

(i) the facility owner (or their authorized representative) takes the tank system out of service by submitting an application to the Department, in accordance with subparagraph 1.9(c)(4)(ii) of this Part, indicating that the tank system is out of service; or

(ii) the tank system is no longer receiving or dispensing petroleum. Within 30 days after the tank system no longer receives or dispenses petroleum, the facility owner (or their authorized representative) must submit an application to the Department, in accordance with subparagraph 1.9(c)(4)(ii) of this Part, indicating that the tank system is out of service.

(2) Out-of-service UST systems are still subject to all applicable requirements of this Part, with the exception of periodic equipment testing/monitoring/inspections, walkthrough inspections, and leak detection required under subdivisions 2.2(e) through (h), and 2.3(a) and (b) of this Subpart, respectively, if the UST system is empty. (A UST system is considered empty when all petroleum has been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue remain in the UST system.)

(i) The suspended requirements of subdivisions 2.2(e) through (h), and 2.3(a) and (b) of this Subpart must resume in accordance with the original schedule when the UST system is returned to service. However, if the UST system has been out of service such that any of the next periodic testing/monitoring/inspections was not conducted in accordance with the original schedule, the testing/monitoring/inspection must be performed when the UST system is returned to service.

(ii) For UST systems taken out of service due to repairs (in response to a leak), the repair and subsequent testing requirements of subparagraph 2.2(j) of this Subpart must be successfully completed before the UST system is returned to service.

(3) When a UST system is out of service for more than 90 days, or has not received or dispensed petroleum in a 90-day period, the following must also be performed:

(i) empty the tank so that no more than 2.5 centimeters (one inch) of residue remains;

(ii) leave vent lines open and functioning; and

(iii) cap and secure all piping, fill ports, gauge openings, vapor returns, pump connections, ancillary equipment, and manways.

(4) When a UST system is out of service for more than 12 months, or has not received or dispensed petroleum in a 12-month period, the UST system must be permanently closed in accordance with subdivisions (b) through (e) of this section.

(b) *Permanent closure.*

(1) At least 30 days before permanent closure, the facility owner (or their authorized representative) must notify the Department of this action, unless such action is in response to corrective action in accordance with Subpart 7 of this Part.

(2) Within 30 days after permanent closure, the facility owner (or their authorized representative) must submit an application to the Department, in accordance with subparagraph 1.9(c)(7)(ii) of this Part, indicating that the UST system has been permanently closed.

(3) The required assessment of the excavation zone under subdivision (c) of this section must be performed after notifying the Department in accordance with paragraph (1) of this subdivision but before completion of the permanent closure. The resultant report must be submitted to the Department within 90 days after permanent closure in accordance with paragraph (e)(2) of this section.

(4) All scheduled deliveries to UST systems that have undergone permanent closure, must be terminated.

(5) *Methods of permanent closure.*

(i) To perform a tank removal, all liquids and accumulated sludge must be removed from the tank system prior to removing the tank from the ground. All lines (including delivery piping) must be either disconnected and removed, or securely capped or plugged. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) API RP 1604, March 1996;

(b) PEI RP 1700, 2018 edition; or

(c) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) To perform an in-place closure, all liquids, accumulated sludge, and petroleum vapors must be removed from the tank system prior to filling the tank with an inert solid material (e.g., sand or concrete slurry). All voids within the tank must be filled. All lines (including delivery piping) must be either disconnected and removed, or securely capped or plugged, and all manways must be securely fastened in place. Tanks that will have a new tank installed within them need not be filled with an inert solid material, but the remaining requirements of this subparagraph and those of subdivisions (c) through (e) of this section must be met. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) API RP 1604, March 1996;

(b) PEI RP 1700, 2018 edition; or

(c) a code of practice developed by a nationally recognized associated or independent testing laboratory and approved by the Department.

(iii) To perform a change-in-service, all liquids, accumulated sludge, and petroleum vapors must be removed from the tank system prior to changing the stored substance. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) API RP 1604, March 1996;

(b) API RP 2015, August 2001;

(c) API RP 2016, August 2001;

(d) NFPA 326, 2010 edition;

(e) PEI RP 1700, 2018 edition; or

(f) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(6) UST systems that have been permanently closed may not be returned to service unless all components of the UST system meet applicable requirements for the latest Category.

(c) *Assessing the site at closure.*

(1) Before permanent closure 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 following must also be considered: method of closure; the petroleum stored; the type of backfill; depth to groundwater; and other factors appropriate for identifying the presence of a release. The requirements of this subdivision are satisfied if:

(i) at the time of permanent closure, there is no physical evidence (*i.e.*, contaminated soils, contaminated groundwater, or petroleum as a liquid or vapor) that a release has occurred around the UST system;

(ii) the UST system was being monitored for leaks at weekly intervals using one of the methods listed under paragraphs 2.3(c)(5) and (6) of this Subpart at the time of permanent closure; and

(iii) the leak detection method listed under paragraph 2.3(c)(5) or (6) of this Subpart indicate that no release has occurred.

(2) If contaminated soils, contaminated groundwater, or petroleum as a liquid or vapor is discovered, corrective action must begin in accordance with Subpart 7 of this Part.

(d) For any UST system that has been out of service since December 27, 1986 and which has not been properly permanently closed in accordance with this section or in accordance with prior Department regulations governing UST system closure, the UST system must be permanently closed and the excavation zone assessed for releases, in accordance with this section.

(e) *Recordkeeping.* Records required by this section must be retained for three years after permanent closure, or until the facility has been permanently closed, whichever is later. Copies of these records must consist of the following:

(1) a report detailing that the tank was permanently closed in accordance with subparagraph (b)(5)(i), (ii), or (iii) of this section (and which must be submitted to the Department within 30 days after permanent closure); and

(2) a report detailing the required site assessment in accordance with subdivision (c) of this section (and which must be submitted to the Department within 90 days after permanent closure).

Subpart 613-3 UST Systems Subject Only to Title 10

613-3.1 UST systems: design, construction, and equipment.

(a) *Applicability.* The provisions of this Subpart apply to UST systems that are 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 stores motor fuel for non-commercial purposes (*i.e.*, not for resale) at a farm or residence; or
- (3) is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50.

(b) *Design and equipment requirements for UST systems.* UST systems must meet the following requirements:

(1) *Tank requirements.*

(i) *Category 1 tank requirements.* Reserved.

(ii) *Category 2 tank requirements.* Category 2 tanks must have been properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must have been protected from corrosion in accordance with clause (a), (b), or (c) of this subparagraph. Category 2 tanks in inaccessible areas must instead have met the requirements of clause (d) of this subparagraph. In addition, all tanks must have been secondarily contained in accordance with clause (e) of this subparagraph.

(a) *Fiberglass-reinforced plastic tanks.* Tanks made of fiberglass-reinforced plastic (FRP) must have been designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

- (1) UL 1316, July 1983;
- (2) CAN4-S615-M83, 1983; or
- (3) a code of practice listed under clause (iii)(a) of this paragraph.

(b) *Cathodically protected steel tanks.* Steel tanks must have been cathodically protected in accordance with the following:

(1) The tank was designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, April 1981;

(ii) ULC-S603-M1981, 1981; or

(iii) a code of practice listed under subclause (iii)(b)(1) of this paragraph.

(2) The tank was coated with a suitable dielectric material.

(3) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) API RP 1632, January 1983;

(ii) ULC-S603.1-M1982, 1982;

(iii) sti-P3®, July 1983; or

(iv) a code of practice listed under subclause (iii)(b)(3) of this paragraph.

(4) Field-installed cathodic protection systems were designed by a corrosion expert.

(5) Impressed current systems were designed to allow determination of current operating status as required under paragraph 3.2(i)(3) of this Subpart.

(c) *Clad or jacketed steel tanks.* Steel tanks must have been clad or jacketed with a noncorrodible material in accordance with the following:

(1) The tank was designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, April 1981;

(ii) ULC-S603-M1981, 1981; or

(iii) a code of practice listed under subclause (iii)(c)(1) of this paragraph.

(2) The tank was clad or jacketed with a noncorrodible material in accordance with either one of the codes of practice listed under subclause (iii)(c)(2) of this paragraph or the following:

(i) The tank was electrically insulated from the piping with dielectric fittings, bushings, washers, sleeves or gaskets which are compatible with petroleum, petroleum additives, and corrosive soils.

(ii) The tank had an exterior fiberglass reinforced plastic shell bonded firmly to the steel. This must have consisted 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 have been applied to a thickness of 10 to 15 mils (0.01 to 0.015 inch). The thickness of the completed coating must have been a minimum of 100 mils (0.1 inch) after curing. The coating's coefficient of thermal expansion must have been 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 have been 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 noncorrodible under adverse underground electrolytic conditions and must be compatible with petroleum products and petroleum additives.

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

(d) *Tanks installed in inaccessible areas.* Tanks installed in an inaccessible area must have been designed and constructed in accordance with section 4.1(b)(1)(ii)(a) or (b) of this Part.

(e) *Secondary containment design.* Tanks must have been secondarily contained in accordance with the following:

(1) *Performance standards.* The tank secondary containment is able to:

(i) contain petroleum leaked from the primary containment until it is detected and remediated; and

(ii) prevent the release of petroleum.

(2) *Options for secondary containment.* The tank secondary containment consisted of one of the following:

(i) *Double-walled construction.* Double-walled tanks must have been designed and constructed in accordance with either one of the codes of practice listed under subclause (iii)(e)(2) of this paragraph or the following:

(A) The interstitial space of the double-walled tank can be monitored for tightness.

(B) Steel outer jackets had a minimum thickness of 10-gauge and were coated as required under subclause (b)(2) or item (c)(2)(ii) of this subparagraph.

(C) There were no penetrations of any kind through the jacket to the tank except top entry manholes and fittings required for filling, emptying, or venting the tank, or monitoring the interstitial space.

(D) The outer jacket covered at least the bottom 80 percent of the tank.

(E) The jacket was 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.

(ii) *Vaults.* Vaults must have been liquid-tight, compatible with the petroleum stored in the tank system, and able to withstand chemical deterioration and structural stresses from internal and external causes. The vault must have been a continuous structure with a chemical-resistant water stop used at any joint. There must have been no drain connections or other entries through the vault except for top entry manholes and other top openings required for filling, emptying, venting, and monitoring the tank, and pumping of any petroleum that leaks into the vault.

(iii) *Cut-off walls.* Cut-off walls must have met the following requirements:

(A) Cut-off walls were used only where groundwater levels are above the bottom of the tank excavation.

(B) Cut-off walls consisted of an impermeable barrier with a permeability rate to water equal to or less than 1×10^{-6} cm/s, which will not deteriorate in an underground environment and in the presence of petroleum.

(C) Cut-off walls extended around the perimeter of the excavation and to an elevation below the lowest groundwater level.

(D) If a synthetic membrane was used for a cut-off wall, any seams, punctures, or tears in the membrane must have been repaired in accordance with manufacturer's instructions and made liquid-tight prior to backfilling. No penetrations of the cut-off wall are allowed.

(E) If impervious native soil was used for a cut-off wall, the soil must have been continuous, of sufficient depth, thickness, and extent to contain a leak, and had a permeability rate to water equal to or less than 1×10^{-6} cm/s.

(iv) *Impervious underlayment.* Impervious underlayment must have met the following requirements:

(A) Impervious underlayment was used only under a tank where groundwater levels are below the bottom of the excavation and where soils are well drained. The underlayment had a permeability rate to water equal to or less than 1×10^{-6} cm/s and will not deteriorate in an underground environment and in the presence of petroleum. The underlayment may have consisted of impervious native soils, an impervious concrete pad, a synthetic membrane, or any equivalent material. If a synthetic membrane was used for impervious underlayment, any seams, punctures or tears must have been repaired in accordance with manufacturer's instructions prior to backfilling.

(B) Impervious underlayment extended at least one foot beyond the sides and ends of the tank and had a slope of at least one-quarter inch per foot to a sump. An observation well was positioned in the sump and extended to the surface of the excavation for the purpose of sampling for leaks and pumping out water or petroleum which may accumulate.

(C) Surface waters are drained from the site using practices which may include capping the site with asphalt, concrete, or other impervious cover which is sloped to drainways leading away from the tank.

(iii) *Category 3 tank requirements.* Category 3 tanks must be properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must be protected from corrosion in accordance with clause (a), (b), or (c) of this subparagraph. Category 3 tanks in inaccessible areas must instead meet the requirements of clause (d) of this subparagraph. In addition, all tanks must be secondarily contained in accordance with clause (e) of this subparagraph.

(a) *Fiberglass-reinforced plastic tanks.* Tanks made of fiberglass-reinforced plastic (FRP) must be designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) UL 1316, January 1994;

(2) CAN4-S615-M83, 1998;

(3) UL 1856, June 2020 (structural systems only); or

(4) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) *Cathodically protected steel tanks.* Steel tanks must be cathodically protected in accordance with the following:

(1) The tank is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, December 1996;

(ii) ULC-S603-00, 2000; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) The tank is coated with a suitable dielectric material.

(3) The cathodic protection system is designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) sti-P3®, September 2013;

(ii) UL 1746, January 2007;

(iii) ULC-S603.1-11, 2011;

(iv) NACE SP0285-2011, 2011; or

(v) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(4) Field-installed cathodic protection systems are designed by a corrosion expert.

(5) Impressed current systems are designed to allow determination of current operating status as required under paragraph 3.2(i)(3) of this Subpart.

(c) *Clad or jacketed steel tanks.* Steel tanks must be clad or jacketed with a noncorrodible material in accordance with the following:

(1) The tank is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, December 1996;

(ii) ULC-S603-00, 2000; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) The tank is clad or jacketed with a noncorrodible material that is designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 1746, January 2007;

(ii) STI F894, September 2013;

(iii) STI F961, September 2013;

(iv) STI F922, January 2013; or

(v) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(d) *Tanks installed in inaccessible areas.* Tanks installed in an inaccessible area must be designed and constructed in accordance with section 4.1(b)(1)(iii)(a) or (b) of this Part.

(e) *Secondary containment design.* Tanks must be secondarily contained in accordance with the following:

(1) *Performance standards.* The tank secondary containment is able to:

(i) contain petroleum leaked from the primary containment until it is detected and remediated; and

(ii) prevent the release of petroleum;

(2) Tanks designed and constructed in accordance with clause (a), (b), or (c) of this subparagraph are, at a minimum, double-walled and are also designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 58, December 1996;

(ii) UL 1316, January 1994;

(iii) UL 1746, January 2007;

(iv) UL 1856, June 2020 (structural systems only);

(v) STI F841, January 2006;

(vi) STI F922, January 2013; or

(vii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(3) Tanks installed in accordance with clause (d) of this subparagraph have secondary containment consisting of one of the following:

(i) *Double-walled construction.* Double-walled tanks must be designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(A) UL 142, December 2006;

(B) UL 80, September 2007;

(C) ULC-S601-07, 2007; or

(D) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) *Vaults.* Vaults must be liquid-tight, compatible with the petroleum stored in the tank system, 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 for top entry manholes and other top openings required for filling, emptying, venting, and monitoring the tank, and pumping of any petroleum that leaks into the vault.

(2) *Piping and ancillary equipment requirements.* The requirements of this paragraph apply to all piping and ancillary equipment that are in contact with the ground and routinely contains petroleum.

(i) *Category 1 requirements.* Reserved.

(ii) *Category 2 requirements.* Category 2 piping must have been properly designed, constructed, and protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. Category 2 ancillary equipment must have been protected from corrosion in accordance with clause (b) of this subparagraph, as applicable.

(a) Piping made of a noncorrodible material must have either been designed and constructed in accordance with clause (iii)(a) of this paragraph or met the following requirements:

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

(2) Piping was designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(b) Piping and ancillary equipment made of metal must have either been designed and constructed in accordance with clause (iii)(b) of this paragraph or met the following requirements:

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

(2) Cathodic protection was provided using sacrificial anodes or impressed current.

(3) Monitors were installed and kept in proper working condition to check on the adequacy of the cathodic protection system. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the cathodic protection equipment must be repaired in accordance with subdivision 3.2(j) of this Subpart.

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

(5) Piping was designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(iii) *Category 3 requirements.* Category 3 piping must be properly designed, constructed, and protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. Category 3 ancillary equipment must be protected from corrosion in accordance with clause (b) of this subparagraph, as applicable.

(a) Piping made of a noncorrodible material must meet the following requirements:

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

(2) Piping is designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(3) Piping is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 971, February 2006;

(ii) ULC-S660-08, 2008; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Piping and ancillary equipment made of metal must meet the following requirements:

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

(2) Cathodic protection is provided using sacrificial anodes or impressed current.

(3) Monitors are installed and kept in proper working condition to check on the adequacy of the cathodic protection system. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the cathodic protection equipment must be repaired in accordance with subdivision 3.2(j) of this Subpart.

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

(5) Piping is designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(6) Piping is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 971A, October 2006; or

(ii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(7) The piping or ancillary equipment is coated with a suitable dielectric material.

(8) The cathodic protection system is designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

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

(ii) STI R892, January 2006;

(iii) NACE SP0169-2013, 2013;

(iv) NACE SP0285-2011, 2011; or

(v) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(9) Field-installed cathodic protection systems are designed by a corrosion expert.

(10) Impressed current systems are designed to allow determination of current operating status as required under paragraph 3.2(i)(3) of this Subpart.

(3) *Overfill prevention.* Except as specified under subparagraph (iii) of this paragraph, Category 2 and 3 tanks must be equipped with overfill prevention equipment that meets the following requirements:

(i) Overfill prevention equipment must do one of the following:

(a) accurately show the level/volume of petroleum in the tank and be accessible to the person responsible for transfer activities, such that the level/volume of petroleum in the tank can be conveniently read from the fill port;

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

(c) alert the person responsible for transfer activities when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm (note: vent whistles cannot be used as high-level alarms); or

(d) restrict flow 30 minutes prior to overfilling so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling;

(e) alert the person responsible for transfer activities with a high-level alarm one minute before overfilling so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling (note: vent whistles cannot be used as high-level alarms); or

(f) automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling.

(ii) The overfill prevention equipment must be appropriate for the type of delivery made to the UST system and all other tank system equipment installed.

(iii) Overfill prevention equipment is not required if the UST system is filled by transfers of no more than 25 gallons at one time.

(4) *Fill port catch basins.* Reserved.

(5) *Dispenser systems.* Reserved.

(6) *Valves.* UST systems must be equipped with valves described in this paragraph as applicable.

(i) *Shear valves.* Dispensers of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (*i.e.*, impact valve). Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 4-3.6. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 6.3.9.

(ii) *Solenoid or anti-siphon valves.* Piping and dispensers that are part of UST systems storing motor fuel and are at an elevation below the top of the tank, must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 2-1.7. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 4.2.4.

(iii) *Backflow check valves.* Delivery piping associated with a pump-filled tank must be equipped with a properly functioning check valve or equivalent device that provides automatic protection against backflow. Check valves are required only when the arrangement of the delivery piping is such that backflow from the receiving tank is possible.

(iv) *Operating valves.* Connections on a tank through which petroleum can normally flow and that have the potential to drain the tank via gravity, must be equipped with an operating valve to control the flow. Operating valves must be installed as close as practicable to the tank connection.

(7) *Compatibility.* Tank system equipment must be either made of or lined with materials that are compatible with the petroleum stored in the UST system.

613-3.2 General installation, operation, and maintenance requirements.

(a) *Installation requirements.*

(1) *Category 1 requirements.* Reserved.

(2) *Category 2 requirements.* Category 2 tank system components must have met the following requirements:

(i) Tank system components were installed in accordance with the manufacturer's instructions and NFPA 30, 1984 edition.

(ii) Piping in contact with the ground was tightness tested in accordance with paragraph 3.3(d)(2) of this Subpart before being covered, enclosed, or placed in use.

(iii) Tank system joints were liquid-tight and air-tight.

(iv) Any damage to tank coatings was repaired in accordance with manufacturer's instructions prior to backfilling.

(3) *Category 3 requirements.* Category 3 tank system components must meet the following requirements:

(i) Tank system components are properly installed in accordance with the manufacturer's instructions and one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(a) API RP 1615, April 2011;

(b) PEI RP100, 2011 edition;

(c) NFPA 30 and 30A, 2012 editions; or

(d) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) Piping in contact with the ground is tightness tested in accordance with paragraph 3.3(d)(2) of this Subpart before being covered, enclosed, or placed in use.

(iii) Tank system joints are liquid-tight and air-tight.

(iv) Any damage to tank coatings is repaired in accordance with manufacturer's instructions prior to backfilling.

(b) *As-built information records.* An accurate facility diagram that includes the following information must be maintained until the facility has been permanently closed:

(1) *Category 1 tank system components.* Reserved.

(2) *Category 2 tank system components.*

(i) the location of:

(a) each tank and its associated piping, including registration identification number;

(b) fill ports;

- (c) dispensing equipment;
- (d) check valves;
- (e) transition sumps (if any);
- (f) monitoring or recovery wells (if any); and

(ii) at least one visible reference point (e.g., facility structure), a frame of reference (e.g., north arrow), and scale of the drawing.

(3) *Category 3 tank system components.*

(i) the location of:

(a) each tank and its associated piping, including registration identification number;

(b) fill ports;

(c) dispensing equipment;

(d) check valves;

(e) transition sumps (if any);

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

(ii) at least one visible reference point (e.g., facility structure), a frame of reference (e.g., north arrow), and scale of the drawing; and

(iii) listing the following attributes:

(a) physical dimensions of each tank; and

(b) installation date for each Category 3 piping segment.

(c) *Compatibility with biofuel blends.*

(1) The operator and tank system owner must be able to demonstrate compatibility of every component of a UST system storing petroleum containing either greater than ten percent ethanol or greater than 20 percent biodiesel, using one of the following documents:

(i) a certification or listing of the tank system component by a nationally recognized, independent testing laboratory for use with the stored biofuel blend; or

(ii) a written statement of compatibility from the tank system component manufacturer. The manufacturer's statement must be in writing, indicate an affirmative statement of compatibility, and specify the range of biofuel blends with which the equipment or component is compatible.

(2) *Recordkeeping.* Records required by this subdivision must be maintained until the UST system is permanently closed in accordance with subdivision 3.5(b) of this Subpart.

(d) *Spill and overfill prevention.* Facilities must be protected against releases due to spilling or overfilling in accordance with the following requirements:

(1) Category 2 and 3 tanks must have a label at every fill port indicating the tank's registration identification number, design and working capacities, and type(s) of petroleum that can be stored in the UST system.

(2) Fill ports must be color coded in accordance with API RP 1637 (April 2020). If a UST system contains petroleum that does not have a corresponding API color code, the type of petroleum currently in the UST system must be identified (e.g., stenciled lettering) at or near the fill port. For any fill port connected to multiple tanks storing different types of petroleum, the types of petroleum in each of the UST systems must be identified (e.g., with a label or placard) near the fill port.

(3) Monitoring wells must be clearly identified (e.g., labeled as "monitoring well", color coded in accordance with API RP 1637 (April 2020)) to prevent the accidental delivery of petroleum and must be sealed or capped to prevent liquids from entering from the surface.

(4) *Delivery of petroleum to a UST system.*

(i) The operator, when on the premises or when in control of the delivery, is responsible for transfer activities. If the operator is not on the premises and is not in control of a delivery, the carrier is responsible for transfer activities. The requirements of subparagraphs (ii) through (viii) of this paragraph apply to the person responsible for the transfer activities. The operator or carrier must employ practices for preventing transfer spills, overfills, and releases.

(ii) One of the transfer procedures described in NFPA 385 (2012 edition) or API RP 1007 (March 2001) must be used to comply with the requirements of this paragraph. In circumstances of technical infeasibility, practices must be developed and employed to ensure that releases due to spilling or overfilling do not occur.

(iii) Immediately prior to a delivery, the operator/carrier must determine that the delivery will be made to the proper tank system, the tank has sufficient capacity to receive the volume of petroleum to be delivered, and all ancillary equipment are in the appropriate position to accept delivery. All couplings and other connections must be inspected to ensure that they are leak-free, undamaged, and fully functional. During and after the delivery, all couplings and other connections must be monitored for leaks.

(iv) Immediately prior to a delivery, fill port catch basins must be inspected to ensure that they are empty. No deliveries may be made to the UST system if the fill port catch basin contains water, petroleum, or debris.

(v) Brakes must be set and wheels chocked on all rail cars before and during the delivery.

(vi) When a truck, rail car, or container is connected to the delivery piping, caution signs must be in place to give warning to persons approaching from any potential direction. Signs must remain in place until operations are completed, all connections are removed, and outlets properly closed.

(vii) During the delivery, the operator/carrier must always supervise, monitor, and control the transfer to prevent overfilling and spilling. The operator/carrier must be trained in the proper transfer procedures and must take immediate action to stop the transfer of petroleum when the tank's working capacity has been reached, or if an equipment failure or emergency occurs.

(viii) Immediately after a delivery, fill port catch basins must be inspected to ensure that they are empty. The fill port catch basin may not be left containing water, petroleum, or debris.

(e) *Periodic inspection of overfill prevention equipment.* Reserved.

(f) *Periodic monitoring/testing of fill port catch basins and containment sumps used for interstitial monitoring of piping.* Reserved.

(g) *Periodic inspection/testing of leak detection equipment.*

(1) *Connectivity inspections for electronic equipment.* All electronic monitoring systems must be inspected for connectivity at 30-day intervals.

(2) *Operability inspections.* Reserved.

(3) *Recordkeeping.* Records required by this subdivision must be retained for three years.

(h) *Periodic operation and maintenance walkthrough inspections.* Reserved.

(i) *Operation and maintenance of corrosion protection.* Metal tank system components must be protected from corrosion to prevent releases due to corrosion, until the UST system is permanently closed in accordance with subdivision 3.5(b) of this Subpart.

(1) Corrosion protection systems must be operated and maintained to continuously and adequately protect metal tank system components that are in contact with the ground and routinely contain petroleum.

(2) Cathodic protection systems must be tested for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(i) *Frequency.* Cathodic protection systems are tested within six months of the cathodic protection system's installation, reinstallation, or repair, and at yearly intervals thereafter.

(ii) *Inspection criteria.* One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) is used to determine that cathodic protection is adequate:

(a) NACE TM0101-2012, 2012;

(b) NACE TM0497-2012, 2012;

(c) STI R051, January 2006;

(d) NACE SP0285-2011, 2011; or

(e) NACE SP0169-2013, 2013.

(3) Impressed current systems must be inspected for proper operation every 60 days. The inspection does not need to be conducted by a qualified cathodic protection tester, but must indicate:

(i) the current rectifier readings (both voltage and amperage);

(ii) whether the current amperage reading is within 20 percent of the baseline amperage reading from the previous annual cathodic protection test;

(iii) whether the rectifier clock, if available, has been operated continuously;

(iv) whether the bonding cable connections are secure; and

(v) any issues found and the actions taken to address them.

(4) *Recordkeeping.* Records required by paragraphs (2) and (3) of this subdivision must be retained for three years.

(j) *Repairs and modifications.*

(1) If the tank system or any component thereof is inadequate or not tight, or any inspection shows that continuation of an operation or practice will result in a leak, then:

(i) the operation or practice must be modified or discontinued immediately;

(ii) the tank system or tank system component must be immediately replaced;

or

(iii) the tank system must be immediately emptied and taken out of service in accordance with subdivision 3.5(a) of this Subpart before the necessary repairs and required subsequent testing are performed, unless the tank system is permanently closed in accordance with subdivision 3.5(b) of this Subpart.

(Examples which may indicate that a leak is imminent include: leaking valves, pumps, and pipe joints; inadequate gauges; tightness test failures; excessive thinning of the tank shell which would indicate structural weakness when the tank is filled; and malfunctioning pressure or temperature gauges.)

(2) If the tank system or any component thereof, or continuation of an operation or practice, is not in imminent danger of causing a leak, but an inspection shows that the tank system is malfunctioning or is in disrepair, and that a leak is likely or probable unless action is taken, then:

(i) the operation or practice must be modified or discontinued immediately;

(ii) the tank system or tank system component must be replaced within 90 days (unless a shorter time is deemed necessary by the Department); or

(iii) the tank system must be taken out of service in accordance with subdivision 3.5(a) of this Subpart before the necessary repairs and required subsequent testing are performed, unless the tank system is permanently closed in accordance with subdivision 3.5(b) of this Subpart.

(Examples of such equipment disrepair include: secondary containment dikes with erosion or rodent damage; deficiencies in coatings for preventing corrosion caused by exposure to the environment; malfunctioning leak detection equipment; and cathodic protection systems which fail to provide the necessary electric current to prevent corrosion.)

(3) Repairs must be permanent, equal to or more protective than the standards of original construction or manufacturer's specifications, and must be accompanied by a signed statement from the person who performed the repair that the repaired tank system component meets this requirement.

(4) Repairs to steel tanks must be made with steel welds or steel patches that are welded in place. Welds associated with tank repairs must be inspected and tightness tested within 30 days following the repair.

(5) Repairs to fiberglass-reinforced plastic tanks must be made by the manufacturer's authorized representative in accordance with the manufacturer's specifications for such repair.

(6) Metal pipe sections and fittings from which petroleum has leaked as a result of corrosion or other damage must be replaced.

(7) Noncorrodible pipes and fittings from which petroleum has leaked or that have been damaged must be repaired or replaced.

(8) For a piping repair or replacement, a new piping run must be installed when 50 percent or more of the piping run is removed, unless the piping run meets the requirements of subparagraph 3.1(b)(2)(iii) of this Subpart.

(9) Within 30 days following the repair of tanks and piping, repaired tanks and piping must be tightness tested in accordance with paragraph 3.3(c)(1) and (d)(2) of this Subpart, respectively, with the exception of the following:

(i) tanks that are internally inspected in accordance with API RP 1631 (June 2001) following the repair; and

(ii) tanks and piping that are monitored for leaks in accordance with a method listed under paragraph 3.3(c)(2), (3), (4), (5), or (7), or (d)(3) of this Subpart, as applicable.

(10) Within six months following the repair of any tank system component that is cathodically protected, or any repair or reinstallation of a cathodic protection system, the cathodic protection system must be tested and inspected, as applicable, in accordance with paragraphs (i)(2) and (3) of this section to ensure proper operation.

(11) *Recordkeeping.*

(i) Records required by paragraphs (1) through (10) of this subdivision must be retained until the UST system is permanently closed in accordance with section 3.5(b) of this Subpart.

(ii) Written documentation of all repairs of leak detection equipment installed on-site must be retained for at least three years after the servicing work is completed.

(k) *UST systems in locations subject to flooding.*

(1) For Category 1 or 2 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water, safeguards must be maintained in accordance with section 2-5.6 of NFPA 30 (1984 edition). If such safeguards include ballasting of a tank 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 tank after the flood must not be discharged to the waters of the State unless the discharge is in conformance with the standards of Parts 701, 702, 703, and 750 of this Title, as applicable.

(2) For Category 3 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding or accumulation of water from fire suppression

operations, uplift protection must be provided in accordance with Sections 22.14 and 23.14 of NFPA 30 (2012 edition).

613-3.3 Leak detection.

(a) *General leak detection requirements.*

(1) A method, or combination of methods, of leak detection must be provided, that:

(i) can detect a leak from any portion of the tank and the piping that are in contact with the ground or are in inaccessible areas, and routinely contain 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 under paragraphs (c)(1), (2), (7), and (d)(1) through (3) of this section must be capable of detecting the leak rate or quantity specified for that method with a probability of detection of 95 percent and a probability of false alarm of 5 percent.

(2) If a method of leak detection that complies with the requirements of this section cannot be implemented, the UST system must be permanently closed in accordance with subdivision 3.5(b) of this Subpart.

(3) If the petroleum stored will change such that the UST system would then be subject to new inspections and tests required under this section, these inspections and tests must be performed before the change occurs.

(b) *Specific leak detection requirements for tanks and piping.*

(1) *Tank leak detection.* Tanks must be monitored for leaks as follows:

(i) *Category 1 tanks.* Category 1 tanks must have an annual tank tightness test performed in accordance with paragraph (c)(1) of this section, with the exception of tanks that are:

(a) part of UST systems storing No. 5 or No. 6 fuel oil;

(b) monitored for leaks at weekly intervals using one of the methods listed under paragraphs (c)(2), (3), (4), (5), and (7) of this section; or

(c) encased in concrete and monitored for leaks at weekly intervals in accordance with paragraph (c)(6) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(ii) *Category 2 tanks.* Category 2 tanks must be monitored for leaks at weekly intervals using one of the methods listed under paragraphs (c)(2), (3), (4), and (5) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(iii) *Category 3 tanks.* Category 3 tanks must be monitored for leaks at weekly intervals in accordance with paragraph (c)(5) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

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

(i) *Pressurized piping.*

(a) *Category 1 piping.* Except for piping that is part of UST systems storing No. 5 or No. 6 fuel oil, Category 1 piping that conveys petroleum under pressure must:

(1) be equipped with an automatic line leak detector that is operated in accordance with paragraph (d)(1) of this section;

(2) have an annual line tightness test performed in accordance with paragraph (d)(2) of this section; or

(3) be monitored for leaks at weekly intervals in accordance with paragraph (d)(3) of this section. Continuous electronic monitoring satisfies the weekly monitoring requirement.

(b) *Category 2 piping.* Category 2 piping that conveys petroleum under pressure and is part of UST systems storing motor fuel, must be equipped with an automatic line leak detector that is operated in accordance with paragraph (d)(1) of this section.

(c) *Category 3 piping.* Category 3 piping that conveys petroleum under pressure and is part of UST systems storing motor fuel, must be equipped with an automatic line leak detector that is operated in accordance with paragraph (d)(1) of this section.

(ii) *Suction and gravity-fed piping.*

(a) *Category 1 piping.* Except for piping that is part of UST systems storing No. 5 or No. 6 fuel oil, Category 1 piping that conveys petroleum under suction must have an annual line tightness test in accordance with paragraph (d)(2) of this section.

(b) *Category 2 piping.* Reserved.

(c) *Category 3 piping.* Reserved.

(d) No leak detection is required for suction piping that is demonstrated to be designed and constructed to meet the following standards:

(1) The piping operates at less than atmospheric pressure.

(2) The piping is sloped so that the contents of the pipe will drain back into the tank if the suction is released.

(3) Only one check valve is included in each suction line.

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

(c) *Tank leak detection methods.* Tank leak detection methods used to meet the requirements of paragraph (b)(1) of this section must be conducted in accordance with the following:

(1) *Tank tightness testing.*

(i) 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 tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(ii) *Qualifications of test technicians.* 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) *Automatic tank gauging.* Automatic tank gauging equipment 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 tank that routinely contains petroleum.

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

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

(b) continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the equipment to gather incremental measurements to determine the leak status of the tank 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 (e.g., 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 (e.g., 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 tank.

(iii) The measurement of vapors by the monitoring device is not rendered inoperative by groundwater, rainfall, 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 tank.

(v) Vapor monitors are designed and operated to detect any significant increase in concentration above background levels 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 tank excavation zone, the site is assessed to ensure compliance with the requirements of subparagraphs (i) through (iv) of this paragraph and to establish the number and positioning of monitoring wells or devices that will detect leaks within the excavation zone from any portion of the tank that routinely contains petroleum.

(vii) Monitoring wells are clearly marked in accordance with paragraph 3.2(d)(3) of this Subpart 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/s (e.g., 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 is 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 are 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 of 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 tank that routinely contains petroleum.

(viii) Monitoring wells are clearly marked in accordance with paragraph 3.2(d)(3) of this Subpart and secured to avoid unauthorized access and tampering.

(5) *Interstitial monitoring.* Interstitial monitoring between the primary and secondary containment may be used if the monitoring equipment is designed, constructed, and installed to detect a leak from any portion of the tank that routinely contains petroleum, and if the monitoring equipment meets the requirements of subparagraph (i), (ii), or (iii) of this paragraph:

(i) For a double-walled tank, the sampling or testing method:

(a) can detect a leak through the inner wall in any portion of the tank that routinely contains petroleum; and

(b) is capable of detecting a breach in both the inner and outer walls of the tank if using continuous vacuum, pressure, or liquid-filled methods of interstitial monitoring.

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

(a) The secondary containment consists of artificially constructed material that is sufficiently thick and impermeable (*i.e.*, with a permeability rate to water equal to or less than 1×10^{-6} cm/s) to direct a leak to the monitoring point and permit its detection.

(b) The secondary containment is compatible with the petroleum stored so that a leak from the UST system will not cause a deterioration of the secondary containment, allowing a leak to pass through undetected.

(c) For cathodically protected tanks, the secondary containment is 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 inoperative so that a leak could go undetected for more than seven days.

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

(f) Monitoring wells are clearly marked in accordance with paragraph 3.2(d)(3) of this Subpart and secured to avoid unauthorized access and tampering.

(iii) UST systems installed in a vault that allows for monitoring of the vault space, must meet the requirements of clauses (ii)(a) through (c) of this paragraph.

(6) *Weep holes.* Holes in the base of a concrete form encasing a tank that are used to detect leaks from any portion of the tank that routinely contains petroleum, must be directly visible to an observer and be inspected for obstructions during leak monitoring.

(7) *Other methods.* Another leak detection method, or combination of methods, can be used if:

(i) it can detect a leak at the rate of 0.2 gallons per hour with a probability of detection of 95 percent and a probability of false alarm of 5 percent, and the method is demonstrated to detect a leak as effectively as any of the methods allowed under paragraphs (2) through (5) of this subdivision; and

(ii) the Department approves the method. If the Department approves the method, all conditions imposed by the Department must be met.

(d) *Piping leak detection methods.* Piping leak detection methods used to meet the requirements of paragraph (b)(2) of this section must be conducted in accordance with the following:

(1) *Automatic line leak detectors.* Methods which indicate 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) Line tightness testing must be capable of detecting a leak at the rate of 0.1 gallon per hour at one and one-half times the operating pressure.

(ii) *Qualifications of test technicians.* 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.

(3) *Other methods.* The methods listed under paragraphs (c)(3), (4), (5), and (7) of this section may be used if they are designed to detect a leak from any portion of the piping that routinely contains petroleum.

(e) *Recordkeeping.* Records required by this section must meet the following requirements:

(1) The results or records of any sampling, testing, or monitoring must be retained for at least three years.

(2) The results of tightness testing must be retained for three years or until the next test, whichever is later, and include the following information:

(i) facility registration number;

(ii) tank identification number used on the application form required under section 1.9 of this Part for the tank or piping tested;

(iii) date of test;

(iv) results of test;

(v) test method;

(vi) certification by the technician that the test complies with subparagraph (c)(1)(i) or (d)(2)(i) of this section;

(vii) statement of technician's qualifications;

(viii) address of technician; and

(ix) signature of technician.

(3) A copy of the results of tightness testing must be submitted to the Department within 30 days after performance of the test(s).

(4) Written documentation of all calibration, maintenance, and repairs of leak detection equipment installed on-site must be retained for at least three years after the servicing work is completed. Schedules of required calibration and maintenance provided by the leak detection equipment manufacturer must be retained for five years after the date of equipment installation.

613-3.4 Reporting, investigation, and confirmation.

(a) *Reporting responsibilities.* The reporting requirements of subdivisions (b) and (e) of this section apply to the following persons:

(1) the facility owner;

(2) the tank system owner;

(3) the operator;

(4) the carrier;

(5) any contractor in a contractual relationship with the facility owner, tank system owner, or operator;

(6) any other party and its contractors who have been retained as part of a business transaction relating to the facility;

(7) any person who causes a spill at the facility.

(b) Reporting of suspected leaks.

(1) Suspected leaks must be reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and the procedures in subdivision (d) of this section must be followed for any of the following conditions:

(i) the discovery of petroleum outside of a UST system at the facility or in the surrounding area (*e.g.*, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water);

(ii) unusual operating conditions observed (*e.g.*, the erratic behavior of petroleum dispensing equipment, the sudden loss of petroleum from the UST system, an unexplained presence of water in the tank, or water in the interstitial space of secondarily contained tank system components), unless the tank system component is found to be defective but not leaking, and is immediately repaired or replaced; or

(iii) monitoring/testing results, including alarms, from a leak detection method required under subdivisions 3.3(a) and (b) of this Subpart which indicate that a leak may have occurred, unless:

(a) the monitoring device is found to be defective, and is immediately repaired, recalibrated, or replaced, and additional monitoring does not confirm the initial result; or

(b) the alarm was investigated and determined to be a non-spill event (*e.g.*, from a power surge or caused by filling the tank during leak detection testing).

(2) When a leak is suspected, or where inspections or tests required by this Part have not been performed, 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 ten 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.

(c) Investigation due to off-site impacts. When required by the Department, the procedures in subdivision (d) of this section must be followed to determine if the UST system is the source of off-site impacts. These impacts include the discovery of petroleum (*e.g.*, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby

surface and drinking waters) that has been observed by the Department or brought to its attention by another party.

(d) *Leak investigation and confirmation steps.* Unless corrective action is initiated in accordance with Subpart 7 of this Part, any leak or suspected leak of petroleum must be investigated using either one of the methods described in paragraph (1) or (2) of this subdivision or another procedure approved by the Department. The investigation must commence immediately following the reporting required under subdivision (b) or (e) of this section. The investigation must be completed, and the results submitted to the Department prior to any repairs and within seven days after the reporting required under subdivision (b) or (e) of this section.

(1) *System test.* Testing must be conducted in accordance with paragraph 3.3(c)(1) or (d)(2) of this Subpart to determine: whether a leak exists in the portion of the UST system (including delivery piping) suspected of leaking; and, in the case of petroleum reaching secondary containment, if a breach of secondary containment occurred.

(i) If the test results indicate that a leak or release has occurred, the leaking UST system must be immediately emptied to prevent further leaks and be:

(a) promptly taken out of service in accordance with subdivision 3.5(a) of this Subpart and repaired in accordance with subdivision 3.2(j) of this Subpart;

(b) replaced; or

(c) permanently closed in accordance with subdivision 3.5(b) of this Subpart.

(ii) If the test results indicate that a release has occurred, corrective action must also begin in accordance with Subpart 7 of this Part.

(iii) If the test results do not indicate that a leak exists but environmental contamination is the basis for suspecting a leak, a site check must be conducted in accordance with paragraph (2) of this subdivision.

(iv) If the test results do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a leak, further investigation is not required.

(2) *Site check.* The presence or absence of a release must be measured where contamination is most likely to be present at the facility (*i.e.*, in the excavation zone or at the UST system location). In selecting sample types, sample locations, and measurement methods, the following must also be considered: nature of the type(s) of petroleum previously stored in the UST system; type of initial alarm or cause for suspicion; type of backfill; depth of groundwater; and other factors appropriate for identifying the presence and source of the release.

(i) If the site check results indicate that a release has occurred, corrective action must begin in accordance with Subpart 7 of this Part.

(ii) If the site check results do not indicate that a release has occurred, further investigation is not required.

(e) *Response to spills.*

(1) Releases must be reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and corrective action must begin in accordance with Subpart 7 of this Part.

(2) Spills must be contained and reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and the procedures in subdivision (d) of this section must be followed, unless the spill meets all of the following conditions:

(i) The spill is known to be less than five gallons in total volume.

(ii) It is contained and under the control of the spiller.

(iii) It has not reached and will not reach the lands or waters of the State.

(iv) It is cleaned up within two hours after discovery.

(v) The component of the UST system (including delivery piping) that leaked is promptly repaired in accordance with subdivision 3.2(j) of this Subpart or replaced.

(3) Leaking UST systems must be immediately emptied to prevent further leaks and be:

(i) promptly taken out of service in accordance with subdivision 3.5(a) of this Subpart and repaired in accordance with subdivision 3.2(j) of this Subpart;

(ii) replaced; or

(iii) permanently closed in accordance with subdivision 3.5(b) of this Subpart.

613-3.5 Out-of-service UST systems and closure.

(a) *Out-of-service UST systems.*

(1) A UST system is out of service if:

(i) the facility owner (or their authorized representative) takes the tank system out of service by submitting an application to the Department, in accordance with subparagraph 1.9(c)(4)(ii) of this Part, indicating that the tank system is out of service; or

(ii) the tank system is no longer receiving or dispensing petroleum. Within 30 days after the tank system no longer receives or dispenses petroleum, the facility owner (or their authorized representative) must submit an application to the Department, in accordance with subparagraph 1.9(c)(4)(ii) of this Part, indicating that the tank system is out of service.

(2) Out-of-service UST systems are still subject to all applicable requirements of this Part, with the exception of periodic equipment testing/monitoring/inspections and leak detection required under subdivisions 3.2(g), and 3.3(a) and (b) of this Part, respectively, if the UST system is empty. (A UST system is considered empty when all petroleum has been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue remain in the UST system.)

(i) The suspended requirements of subdivisions 3.2(g) and 3.3(a) and (b) of this Subpart must resume in accordance with the original schedule when the UST system is returned to service. However, if the UST system has been out of service such that any of the next periodic testing/monitoring/inspections was not conducted in accordance with the original schedule, the testing/monitoring/inspection must be performed when the UST system is returned to service.

(ii) For UST systems taken out of service due to repairs (in response to a leak), the repair and subsequent testing requirements of subparagraph 3.2(j) of this Subpart must be successfully completed before the UST system is returned to service.

(3) When a UST system is out of service for more than 90 days, or has not received or dispensed petroleum in a 90-day period, the following must also be performed:

(i) empty the tank so that no more than 2.5 centimeters (one inch) of residue remains;

(ii) leave vent lines open and functioning; and

(iii) cap and secure all piping, fill ports, gauge openings, vapor returns, pump connections, ancillary equipment, and manways.

(4) When a UST system is out of service for more than 12 months, or has not received or dispensed petroleum in a 12-month period, the UST system must be permanently closed in accordance with subdivisions (b) through (d) of this section.

(b) *Permanent closure.*

(1) At least 30 days before permanent closure, the facility owner (or their authorized representative) must notify the Department of this action, unless such action is in response to corrective action in accordance with Subpart 7 of this Part.

(2) Within 30 days after permanent closure, the facility owner (or their authorized representative) must submit an application to the Department, in accordance with subparagraph 1.9(c)(7)(ii) of this Part, indicating that the UST system has been permanently closed.

(3) All scheduled deliveries to UST systems that have undergone permanent closure, must be terminated.

(4) *Methods of permanent closure.*

(i) To perform a tank removal, all liquids and accumulated sludge must be removed from the tank system prior to removing the tank from the ground. All lines (including delivery piping) must be either disconnected and removed, or securely capped or plugged. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) API RP 1604, March 1996;

(b) PEI RP 1700, 2018 edition; or

(c) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) To perform an in-place closure, all liquids, accumulated sludge, and petroleum vapors must be removed from the tank system prior to filling the tank with an inert solid material (e.g., sand or concrete slurry). All voids within the tank must be filled. All lines (including delivery piping) must be either disconnected and removed, or securely capped or plugged, and all manways must be securely fastened in place. Tanks that will have a new tank installed within them need not be filled with an inert solid material, but the remaining requirements of this subparagraph and that of subdivision (d) of this section must be met. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) API RP 1604, March 1996;

(b) PEI RP 1700, 2018 edition; or

(c) a code of practice developed by a nationally recognized associated or independent testing laboratory and approved by the Department.

(iii) To perform a change-in-service, all liquids, accumulated sludge, and petroleum vapors must be removed from the tank system prior to changing the stored substance. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) API RP 1604, March 1996;

(b) API RP 2015, August 2001;

(c) API RP 2016, August 2001;

(d) NFPA 326, 2010 edition;

(e) PEI RP 1700, 2018 edition; or

(f) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(5) UST systems that have been permanently closed may not be returned to service unless all components of the UST system meet applicable requirements for the latest Category.

(c) For any UST system that has been out of service since December 27, 1986 which has not been properly permanently closed in accordance with this section or in accordance with prior Department regulations governing UST system closure, the UST system must be permanently closed in accordance with this section.

(d) *Recordkeeping.* Records required by this section must be retained for three years after permanent closure, or until the facility has been permanently closed, whichever is later. Copies of these records must also be submitted to the Department within 30 days after permanent closure and must consist of a report detailing that the tank was permanently closed in accordance with subparagraph (b)(4)(i), (ii), or (iii) of this section.

Subpart 613-4 AST Systems

613-4.1 AST systems: design, construction, and equipment.

(a) *Applicability.*

(1) The provisions of this Subpart apply to AST systems that are part of a facility except for AST systems that are subject to Subpart 5 of this Part.

(2) *AST systems with field-constructed tanks with a design capacity greater than 50,000 gallons.* AST systems with field-constructed tanks with a design capacity greater than 50,000 gallons that are subject to this Subpart may utilize the alternatives provided in subdivision (c) of this section and paragraph 4.3(d)(3) of this Subpart.

(b) *Design and equipment requirements for AST systems.* AST systems must meet the following requirements:

(1) *Tank requirements.*

(i) *Category 1 tank requirements.* Category 1 tanks must have been secondarily contained in accordance with clause (a) of this subparagraph.

(a) *Secondary containment design.* Tanks must have been secondarily contained in accordance with the following:

(1) *AST systems with tanks less than 10,000 gallons.* Tanks with a design capacity less than 10,000 gallons and are in close proximity to sensitive receptors either utilized a design/technology such that a release is not reasonably expected to occur (e.g., overfills from the fill port, vent, and emergency vent; spills at the fill port from the delivery hose; leaks from valves, pumps, and other connections to the tank; flow from valves left open either by accident or by vandals; vehicular traffic that could contact the tank and cause it to rupture; flooding and flotation; fires around the tank that could cause the tank to weaken, rupture or overflow; vandalism) or had secondary containment that met the requirements of subclause (2) of this clause. Tanks within 500 horizontal feet of the following resources are considered to be in close proximity to sensitive receptors:

(i) perennial or intermittent streams;

(ii) public or private wells;

(iii) primary or principal aquifers as defined in USGS Water Resource Investigation Reports 87-4274, 87-4275, 87-4276, 87-4122, 88-4076, and Appendix C;

(iv) wetlands as defined in Part 664 of this Title;

bodies; or

(v) lakes/ponds, estuaries, or other similar surface water

(vi) storm drains.

(2) *AST systems with tanks equal to or greater than 10,000 gallons.* Tanks with a design capacity equal to or greater than 10,000 gallons had secondary containment that met the following requirements:

(i) The tank secondary containment is able to contain petroleum leaked from the primary containment until it is detected and remediated.

(ii) The tank secondary containment is able to prevent the release of petroleum.

(iii) Secondary containment consisted of a combination of dikes, under-tank liners, pads, ponds, impoundments, curbs, ditches, sumps, tanks used for emergency or overflow containment, or other equipment capable of containing the petroleum stored. Construction and capacity of the secondary containment must be in accordance with NFPA 30 (1984 edition), section 2-2.3 or NFPA 30 (2012 edition), section 22.11. For compartmented tanks, the capacity of the secondary containment must be based on the capacity of the largest compartment in the tank.

(iv) If soil was 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.

(ii) *Category 2 tank requirements.* Category 2 tanks must have been properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must have been protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. In addition, all tanks must have been secondarily contained in accordance with clause (c) of this subparagraph.

(a) Tanks with a design capacity equal to or greater than 60 gallons must have met the following requirements:

(1) The tank was designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 142, January 1985;

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

(iii) API Standard 650, February 1984;

(iv) CAN4-S601-M84, 1984;

(v) CAN4-S630-M84, 1984; or

(vi) a code of practice listed under subclause (iii)(a)(1) of this paragraph.

(2) The tank was constructed of steel and had a surface coating designed to prevent corrosion and deterioration.

(3) Any portion of the tank in contact with the ground was protected from corrosion.

(b) Tanks storing Class IIIB petroleum did not have to be constructed of steel if installed in areas that would not be exposed to a spill or leak of Class I or Class II petroleum (classes of petroleum are described in NFPA 30, 2012 edition). These tanks must instead have been designed and constructed in accordance with a code of practice listed under clause (iii)(b) of this paragraph.

(c) *Secondary containment design.* Tanks must have been secondarily contained in accordance with the following:

(1) *AST systems with tanks less than 10,000 gallons.* Tanks with a design capacity less than 10,000 gallons and are in close proximity to sensitive receptors either utilized a design/technology such that a release is not reasonably expected to occur (e.g., overfills from the fill port, vent, and emergency vent; spills at the fill port from the delivery hose; leaks from valves, pumps, and other connections to the tank; flow from valves left open either by accident or by vandals; vehicular traffic that could contact the tank and cause it to rupture; flooding and flotation; fires around the tank that could cause the tank to weaken, rupture or overflow; vandalism) or had secondary containment that met the requirements of subclause (2) of this clause. Tanks within 500 horizontal feet of the following resources are considered to be in close proximity to sensitive receptors:

(i) perennial or intermittent streams;

(ii) public or private wells;

(iii) primary or principal aquifers as defined in USGS Water Resource Investigation Reports 87-4274, 87-4275, 87-4276, 87-4122, 88-4076, and Appendix C;

(iv) wetlands as defined in Part 664 of this Title;

(v) lakes/ponds, estuaries, or other similar surface water bodies; or

(vi) storm drains.

(2) *AST systems with tanks equal to or greater than 10,000 gallons.* Tanks with a design capacity equal to or greater than 10,000 gallons had secondary containment that met the following requirements:

(i) The tank secondary containment is able to contain petroleum leaked from the primary containment until it is detected and remediated.

(ii) The tank secondary containment is able to prevent the release of petroleum.

(iii) Secondary containment consisted of a combination of dikes, under-tank liners, pads, ponds, impoundments, curbs, ditches, sumps, tanks used for emergency or overflow containment, or other equipment capable of containing the petroleum stored. Construction and capacity of the secondary containment must be in accordance with NFPA 30 (1984 edition), section 2-2.3 or NFPA 30 (2012 edition), section 22.11. For compartmented tanks, the capacity of the secondary containment must be based on the capacity of the largest compartment in the tank.

(iv) If soil was 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.

(3) Except for tanks that are entirely aboveground (e.g., a tank on a rack, cradle, or stilts), tanks were either underlain by an impermeable barrier or constructed with a double-bottom that meets the following:

(i) Impermeable barriers must:

(A) have a permeability rate to water equal to or less than 1×10^{-6} cm/s;

(B) not deteriorate in an underground environment, in the presence of petroleum, or due to the structural stresses of the tank; and

(C) be capable of being monitored for leaks between the barrier and the tank bottom.

(ii) Double-bottom tanks must be capable of being monitored for leaks between the tank bottoms before petroleum reaches the environment.

(iii) *Category 3 tank requirements.* Category 3 tanks must be properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must be protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. In addition, all tanks must be secondarily contained in accordance with clause (c) of this subparagraph.

(a) Tanks with a design capacity equal to or greater than 60 gallons must meet the following requirements:

(1) The tank is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 142, December 2006;

(ii) UL 80, September 2007;

(iii) API Standard 620, February 2008;

(iv) API Standard 650, March 2013;

(v) ULC-S601-07, 2007; or

(vi) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(2) The tank is constructed of steel and has a surface coating designed to prevent corrosion and deterioration.

(3) Any portion of the tank in contact with the ground is protected from corrosion in accordance with API Standard 651 (January 2007).

(b) Tanks storing Class IIIB petroleum do not have to be constructed of steel if installed in areas that would not be exposed to a spill or leak of Class I or Class II petroleum (classes of petroleum are described in NFPA 30, 2012 edition). These tanks must instead have been designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) UL 2258, 2010; or

(2) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(c) *Secondary containment design.* Tanks must be secondarily contained in accordance with the following:

(1) *AST systems with tanks less than 10,000 gallons.* Tanks with a design capacity less than 10,000 gallons and are in close proximity to sensitive receptors either utilize a design/technology such that a release is not reasonably expected to occur (e.g., overfills from the fill port, vent, and emergency vent; spills at the fill port from the delivery hose; leaks from valves, pumps, and other connections to the tank; flow from valves left open either by accident or by vandals; vehicular traffic that could contact the tank and cause it to rupture; flooding and flotation; fires around the tank that could cause the tank to weaken, rupture or

overflow; vandalism with ballistics) or have secondary containment that meets the requirements of subclause (2) of this clause. Tanks within 500 horizontal feet of the following resources are considered to be in close proximity to sensitive receptors:

(i) perennial or intermittent streams;

(ii) public or private wells;

(iii) primary or principal aquifers as defined in USGS Water Resource Investigation Reports 87-4274, 87-4275, 87-4276, 87-4122, 88-4076, and Appendix C;

(iv) wetlands as defined in Part 664 of this Title;

(v) lakes/ponds, estuaries, or other similar surface water bodies; or

(vi) storm drains.

(2) *AST systems with tanks equal to or greater than 10,000 gallons.* Tanks with a design capacity equal to or greater than 10,000 gallons have secondary containment that meets the following requirements:

(i) The tank secondary containment is able to contain petroleum leaked from the primary containment until it is detected and remediated.

(ii) The tank secondary containment is able to prevent the release of petroleum.

(iii) Secondary containment consists of a combination of dikes, under-tank liners, pads, ponds, impoundments, curbs, ditches, sumps, tanks used for emergency or overflow containment, or other equipment capable of containing the petroleum stored. Construction and capacity of the secondary containment must be in accordance with NFPA 30 (1984 edition), section 2-2.3 or NFPA 30 (2012 edition), section 22.11. For compartmented tanks, the capacity of the secondary containment must be based on the capacity of the largest compartment in the tank.

(iv) 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.

(3) Except for tanks that are entirely aboveground (e.g., a tank on a rack, cradle, or stilts), tanks are either underlain by an impermeable barrier or constructed with a double-bottom that meets the following:

(i) Impermeable barriers must:

(A) have a permeability rate to water equal to or less than 1×10^{-6} cm/s;

(B) not deteriorate in an underground environment, in the presence of petroleum, or due to the structural stresses of the tank; and

(C) be capable of being monitored for leaks between the barrier and the tank bottom.

(ii) Double-bottom tanks must be capable of being monitored for leaks between the tank bottoms before petroleum reaches the environment.

(2) *Piping and ancillary equipment requirements.* The requirements of this paragraph apply to all piping and ancillary equipment that are in contact with the ground and routinely contains petroleum.

(i) *Category 1 requirements.* Reserved.

(ii) *Category 2 requirements.* Category 2 piping must have been properly designed, constructed, and protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. Category 2 ancillary equipment must have been protected from corrosion in accordance with clause (b) of this subparagraph, as applicable.

(a) Piping made of a noncorrodible material must have either been designed and constructed in accordance with clause (iii)(a) of this paragraph or met the following requirements:

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

(2) Piping was designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(b) Piping and ancillary equipment made of metal must have either been designed and constructed in accordance with clause (iii)(b) of this paragraph or met the following requirements:

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

(2) Cathodic protection was provided using sacrificial anodes or impressed current.

(3) Monitors were installed and kept in proper working condition to check on the adequacy of the cathodic protection system. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the cathodic protection equipment must be repaired in accordance with subdivision 4.2(j) of this Subpart.

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

(5) Piping was designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(iii) *Category 3 piping requirements.* Category 3 piping must be properly designed, constructed, and protected from corrosion, in accordance with clause (a) or (b) of this subparagraph. Category 3 ancillary equipment must be protected from corrosion in accordance with clause (b) of this subparagraph, as applicable.

(a) Piping made of a noncorrodible material must meet the following requirements:

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

(2) Piping is designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(3) Piping is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 971, February 2006;

(ii) ULC-S660-08, 2008; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(b) Piping and ancillary equipment made of metal must meet the following requirements:

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

(2) Cathodic protection is provided using sacrificial anodes or impressed current.

(3) Monitors are installed and kept in proper working condition to check on the adequacy of the cathodic protection system. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the cathodic protection equipment must be repaired in accordance with subdivision 4.2(j) of this Subpart.

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

(5) Piping is designed, constructed, and installed with access ports to permit tightness testing without the need for extensive excavation.

(6) Piping is designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) UL 971A, October 2006; or

(ii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(7) The piping or ancillary equipment is coated with a suitable dielectric material.

(8) The cathodic protection system is designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

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

(ii) STI R892, January 2006;

(iii) NACE SP0169-2013, 2013;

(iv) NACE SP0285-2011, 2011; or

(v) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(9) Field-installed cathodic protection systems are designed by a corrosion expert.

(10) Impressed current systems are designed to allow determination of current operating status as required under paragraph 4.2(i)(3) of this Subpart.

(3) *Overfill prevention.* Tanks must be equipped with overfill prevention equipment that meets the following requirements:

(i) Overfill prevention equipment must do one of the following:

(a) accurately show the level/volume of petroleum in the tank and be accessible to the person responsible for transfer activities, such that the level/volume of petroleum in the tank can be conveniently read from the fill port;

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

(c) alert the person responsible for transfer activities when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm (note: vent whistles cannot be used as high-level alarms);

(d) restrict flow 30 minutes prior to overfilling so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling;

(e) alert the person responsible for transfer activities with a high-level alarm one minute before overfilling so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling (note: vent whistles cannot be used as high-level alarms); or

(f) automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to petroleum due to overfilling.

(ii) The overfill prevention equipment must be appropriate for the type of delivery made to the AST system and all other tank system equipment installed.

(4) *Fill port catch basins.* Reserved.

(5) *Dispenser systems.* Reserved.

(6) *Valves.* AST systems must be equipped with valves described in this paragraph as applicable.

(i) *Shear valves.* Dispensers of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (*i.e.*, impact valve). Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 4-3.6. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 6.3.9.

(ii) *Solenoid or anti-siphon valves.* Piping and dispensers that are part of AST systems storing motor fuel and are at an elevation below the top of the tank, must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 2-1.7. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 4.2.4.

(iii) *Backflow check valves.* Delivery piping associated with a pump-filled tank must be equipped with a properly functioning check valve or equivalent device that provides

automatic protection against backflow. Check valves are required only when the arrangement of the delivery piping is such that backflow from the receiving tank is possible. Where loading and unloading is done through a common pipe system, an operating valve accessible to the person responsible for transfer activities, may be used in place of a check valve.

(iv) *Operating valves.* Connections on a tank through which petroleum can normally flow and that have the potential to drain the tank via gravity, must be equipped with an operating valve to control the flow. Operating valves must be installed as close as practicable to the tank connection.

(7) *Compatibility.* Tank system equipment must be either made of or lined with materials that are compatible with the petroleum stored in the AST system.

(c) *Alternative requirements for AST systems with field-constructed tanks greater than 50,000 gallons.* AST systems with field-constructed tanks with a design capacity greater than 50,000 gallons may meet the following alternative requirements in lieu of the equivalent provisions under subdivision 4.1(b) of this section:

(1) *Tank requirements.* Reserved.

(2) *Piping requirements.* The requirements of this paragraph apply to all piping that are in contact with the ground and routinely contain petroleum.

(i) *Category 1 piping requirements.* Category 1 piping must have either been constructed of metal, properly designed, constructed, and protected from corrosion, in accordance with clauses (a) through (c) of this subparagraph by October 13, 2018, or removed.

(a) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) NACE SP0169-2013, 2013;

(2) a code of practice developed by a nationally recognized associated or independent testing laboratory and approved by the Department.

(b) Field-installed cathodic protection systems were designed by a corrosion expert.

(c) Impressed current systems were designed to allow determination of current operating status as required under paragraph 4.2(i)(3) of this Subpart.

(ii) *Category 2 piping requirements.* Category 2 piping must have either been constructed of metal, properly designed, constructed, and protected from corrosion, in accordance with clauses (a) through (c) of this subparagraph by October 13, 2018, or removed.

(a) The cathodic protection system was designed, fabricated, and installed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(1) NACE SP0169-2013, 2013;

(2) a code of practice developed by a nationally recognized associated or independent testing laboratory and approved by the Department.

(b) Field-installed cathodic protection systems were designed by a corrosion expert.

(c) Impressed current systems were designed to allow determination of current operating status as required under paragraph 4.2(i)(3) of this Subpart.

(iii) *Category 3 piping requirements.* Category 3 piping must be properly designed and constructed, and any portion in contact with the ground and routinely contains petroleum must be protected from corrosion, in accordance with subparagraph (b)(2)(iii) of this section, but may alternatively be designed and constructed in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references), in lieu of the codes of practice listed under subclause (b)(2)(iii)(a)(3) or (b)(2)(iii)(b)(6) of this section:

(a) DoD UFC 3-460-01, 2018; or

(b) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

613-4.2 General installation, operation, and maintenance requirements.

(a) *Installation requirements.*

(1) *Category 1 requirements.* Reserved.

(2) *Category 2 requirements.* Category 2 tank system components must have met the following requirements:

(i) Tank system components were installed in accordance with the manufacturer's instructions and NFPA 30, 1984 edition.

(ii) AST systems were supported on a well-drained stable foundation which prevents movement, rolling, or settling of the tank and is designed to minimize corrosion of the tank bottom.

(iii) Aboveground tanks, pipes and distribution equipment were not located along highway curves or otherwise exposed to traffic hazards.

(iv) Tanks were tightness tested, as installed, prior to first receipt of petroleum.

(v) Piping in contact with the ground was tightness tested in accordance with paragraph 4.3(d)(2) of this Subpart before being covered, enclosed, or placed in use.

(vi) Tank system joints were liquid-tight and air-tight.

(3) *Category 3 requirements.* Category 3 tank system components must meet the following requirements:

(i) Tank system components are properly installed in accordance with NFPA 30, 2012 edition.

(ii) AST systems are supported on a well-drained stable foundation which prevents movement, rolling, or settling of the tank and is designed to minimize corrosion of the tank bottom.

(iii) Aboveground tanks, pipes and distribution equipment must not be located along highway curves or otherwise exposed to traffic hazards.

(iv) Tanks are tightness tested in accordance with paragraph 4.3(c)(1) of this Subpart and inspected in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references), as installed, prior to first receipt of petroleum:

(a) API Standard 650, March 2013;

(b) API Standard 653, April 2009;

(c) NFPA 30, 2012 edition;

(d) PEI RP200, 2013 edition;

(e) STI SP001, September 2011;

(f) UL 142, December 2006; or

(g) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(v) Records of the tank tightness test and inspection required under subparagraph (iv) of this paragraph must be retained for five years, and a copy of the results of the tank tightness testing must be submitted to the Department within 30 days performance of the test.

(vi) Piping in contact with the ground is tightness tested in accordance with paragraph 4.3(d)(2) of this Subpart before being covered, enclosed, or placed in use.

(vii) Tank system joints are liquid-tight and air-tight.

(b) *As-built diagram.* Reserved.

(c) *Compatibility with biofuel blends.*

(1) The operator and tank system owner must be able to demonstrate compatibility of every component of an AST system storing petroleum containing either greater than ten percent ethanol or greater than 20 percent biodiesel, using one of the following documents:

(i) a certification or listing of the tank system component by a nationally recognized, independent testing laboratory for use with the stored biofuel blend; or

(ii) a written statement of compatibility from the tank system component manufacturer. The manufacturer's statement must be in writing, indicate an affirmative statement of compatibility, and specify the range of biofuel blends with which the equipment or component is compatible.

(2) *Recordkeeping.* Records required by this subdivision must be maintained until the AST system is permanently closed in accordance with subdivision 4.5(b) of this Subpart.

(d) *Spill and overfill prevention.* Facilities must be protected against releases due to spilling or overfilling in accordance with the following requirements:

(1) Tanks must have a label (e.g., stenciled lettering) at or near every fill port indicating the tank's registration identification number, and design and working capacities.

(2) Fill ports must be color coded in accordance with API RP 1637 (April 2020). If an AST system contains petroleum that does not have a corresponding API color code, the type of petroleum currently in the AST system must be identified (e.g., stenciled lettering) at or near the fill port. For any fill port connected to multiple tanks storing different types of petroleum, the types of petroleum in each of the AST systems must be identified (e.g., with a label or placard) near the fill port. If a fill port is remote from the tank, the type of petroleum current in the AST system must also be identified (e.g., API color code, stenciled lettering) at the tank.

(3) Monitoring wells must be clearly identified (e.g., labeled as "monitoring well", color coded in accordance with API RP 1637 (April 2020)) to prevent the accidental delivery of petroleum and must be sealed or capped to prevent liquids from entering from the surface.

(4) *Delivery of petroleum to an AST system.*

(i) The operator, when on the premises or when in control of the delivery, is responsible for transfer activities. If the operator is not on the premises and is not in control of a delivery, the carrier is responsible for transfer activities. The requirements of subparagraphs (ii) through (viii) of this paragraph apply to the person responsible for the transfer activities. The operator or carrier must employ practices for preventing transfer spills, overfills, and releases.

(ii) One of the transfer procedures described in NFPA 385 (2012 edition) or API RP 1007 (March 2001) must be used to comply with the requirements of this paragraph. In circumstances of technical infeasibility, practices must be developed and employed to ensure that releases due to spilling or overfilling do not occur.

(iii) Immediately prior to a delivery, the operator/carrier must determine that the delivery will be made to the proper tank system, the tank has sufficient capacity to receive the volume of petroleum to be delivered, and all ancillary equipment are in the appropriate position to accept delivery. All couplings and other connections must be inspected to ensure that they are leak-free, undamaged, and fully functional. During and after the delivery, all couplings and other connections must be monitored for leaks.

(iv) Immediately prior to a delivery, fill port catch basins must be inspected to ensure that they are empty. No deliveries may be made to the AST system if the fill port catch basin contains water, petroleum, or debris.

(v) Brakes must be set and wheels chocked on all rail cars before and during the delivery.

(vi) When a truck, rail car, or container is connected to the delivery piping, caution signs must be in place to give warning to persons approaching from any potential direction. Signs must remain in place until operations are completed, all connections are removed, and outlets properly closed.

(vii) During the delivery, the operator/carrier must always supervise, monitor, and control the transfer to prevent overfilling and spilling. The operator/carrier must be trained in the proper transfer procedures and must take immediate action to stop the transfer of petroleum when the tank's working capacity has been reached, or if an equipment failure or emergency occurs.

(viii) Immediately after a delivery, fill port catch basins must be inspected to ensure that they are empty. The fill port catch basin may not be left containing water, petroleum, or debris.

(e) *Periodic inspection of overfill prevention equipment.* Reserved.

(f) *Periodic monitoring/testing of fill port catch basins and containment sumps used for interstitial monitoring of piping.* Reserved.

(g) *Periodic monitoring/testing of leak detection equipment.* Reserved.

(h) *Periodic operation and maintenance walkthrough inspections.*

(1) *Walkthrough inspection practices.* Walkthrough inspections that, at a minimum, check the following equipment at 30-day intervals, must be performed to ensure proper operation and maintenance of AST systems:

- (i) leak detection equipment/systems;
- (ii) cathodic protection equipment/systems;
- (iii) overfill prevention equipment;
- (iv) any other monitoring/warning equipment/system installed;
- (v) for AST systems with tanks that are fully enclosed within pre-fabricated secondary containment:

- (a) exterior surfaces of the tank secondary containment;
- (b) exterior surfaces of accessible portions of piping and ancillary equipment; and
- (c) the interstitial space of traditional and modified double-walled tanks;

(vi) for AST systems with tanks that are insulated in order to store heated petroleum and within secondary containment:

- (a) the tank insulation; and
- (b) exterior surfaces of accessible portions of piping and ancillary equipment;

(vii) for all other AST systems:

- (a) exterior surfaces of the tank; and
- (b) exterior surfaces of piping and ancillary equipment.

(2) The inspection must identify deficiencies, as applicable, including 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.

(3) If any portion of the AST system is not inspected as required, that AST system must be promptly taken out of service in accordance with subdivision 4.5(a) of this Subpart.

(4) *Recordkeeping.* Records required by this subdivision must be retained for three years.

(i) *Operation and maintenance of corrosion protection.* Metal tank system components must be protected from corrosion to prevent releases due to corrosion, until the AST system is permanently closed in accordance with subdivision 4.5(b) of this Subpart.

(1) Corrosion protection systems must be operated and maintained to continuously and adequately protect metal tank system components that are in contact with the ground and routinely contain petroleum.

(2) Cathodic protection systems must be tested for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(i) *Frequency.* Cathodic protection systems are tested within six months of the cathodic protection system's installation, reinstallation, or repair, and at yearly intervals thereafter.

(ii) *Inspection criteria.* One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) is used to determine that cathodic protection is adequate:

(a) API RP 651, January 2007; or

(b) NACE RP0193-2001, 2001.

(3) Impressed current systems must be inspected for proper operation every 60 days. The inspection does not need to be conducted by a qualified cathodic protection tester, but must indicate:

(i) the current rectifier readings (both voltage and amperage);

(ii) whether the current amperage reading is within 20 percent of the baseline amperage reading from the previous annual cathodic protection test;

(iii) whether the rectifier clock, if available, has been operated continuously;

(iv) whether the bonding cable connections are secure; and

(v) any issues found and the actions taken to address them.

(4) *Recordkeeping.* Records required by paragraphs (2) and (3) of this subdivision must be retained for three years.

(j) *Repairs and modifications.*

(1) If the tank system or any component thereof is inadequate or not tight, or any inspection shows that continuation of an operation or practice will result in a leak, then:

(i) the operation or practice must be modified or discontinued immediately;

(ii) the tank system or tank system component must be immediately replaced;

or

(iii) the tank system must be immediately emptied and taken out of service in accordance with subdivision 4.5(a) of this Subpart before the necessary repairs and required subsequent testing are performed, unless the tank system is permanently closed in accordance with subdivision 4.5(b) of this Subpart.

(Examples which may indicate that a leak is imminent include: leaking valves, pumps, and pipe joints; inadequate gauges; tightness test failures; excessive thinning of the tank shell which would indicate structural weakness when the tank is filled; and malfunctioning pressure or temperature gauges.)

(2) If the tank system or any component thereof, or continuation of an operation or practice, is not in imminent danger of causing a leak, but an inspection shows that the tank system is malfunctioning or is in disrepair, and that a leak is likely or probable unless action is taken, then:

(i) the operation or practice must be modified or discontinued immediately;

(ii) the tank system or tank system component must be replaced within 90 days (unless a shorter time is deemed necessary by the Department); or

(iii) the tank system must be taken out of service in accordance with subdivision 4.5(a) of this Subpart before the necessary repairs and required subsequent testing are performed, unless the tank system is permanently closed in accordance with subdivision 4.5(b) of this Subpart.

(Examples of such equipment disrepair include: secondary containment dikes with erosion or rodent damage; deficiencies in coatings for preventing corrosion caused by exposure to the environment; malfunctioning leak detection equipment; and cathodic protection systems which fail to provide the necessary electric current to prevent corrosion.)

(3) Repairs must be permanent, equal to or more protective than the standards of original construction or manufacturer's specifications, and must be accompanied by a signed statement from the person who performed the repair that the repaired tank system component meets this requirement.

(4) Repairs to steel tanks must be made with steel welds or steel patches that are welded in place. Welds associated with tank repairs must be inspected and tightness tested within 30 days following the repair.

(5) Metal pipe sections and fittings from which petroleum has leaked as a result of corrosion or other damage must be replaced.

(6) Noncorrodible pipes and fittings from which petroleum has leaked or that have been damaged must be repaired or replaced.

(7) For a piping repair or replacement, a new piping run must be replaced when 50 percent or more of the piping run is removed, unless the piping run meets the requirements of subparagraph 4.1(b)(2)(iii) of this Subpart.

(8) Within 30 days following the repair of tanks and piping, repaired tanks and piping must be tightness tested in accordance with paragraph 4.3(c)(1) and (d)(2) of this Subpart, respectively, with the exception of the following:

(i) tanks that are internally inspected in accordance with API Standard 653 (April 2009) or STI SP001 (September 2011) following the repair; and

(ii) Category 1 piping that is associated with a field-constructed tank with a design capacity greater than 50,000 gallons, and is tightness tested in accordance with paragraph 4.3(d)(3) of this Subpart following the repair.

(9) Within six months following the repair of any tank system component that is cathodically protected, or any repair or reinstallation of a cathodic protection system, the cathodic protection system must be tested and inspected, as applicable, in accordance with paragraphs (i)(2) and (3) of this section to ensure proper operation.

(10) *Recordkeeping.*

(i) Records required by paragraphs (1) through (9) of this subdivision must be retained until the AST system is permanently closed in accordance with section 4.5(b) of this Subpart.

(ii) Written documentation of all repairs of leak detection equipment installed on-site must be retained for at least three years after the servicing work is completed.

(k) *AST systems in locations subject to flooding.*

(1) For Category 1 or 2 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water, safeguards must be maintained in accordance with section 2-5.6 of NFPA 30 (1984 edition). If such safeguards include ballasting of a tank 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 tank after the flood must not be discharged to the waters of the State unless the discharge is in conformance with the standards of Parts 701, 702, 703, and 750 of this Title, as applicable.

(2) For Category 3 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding or accumulation of water from fire suppression operations, uplift protection must be provided in accordance with Sections 22.14 and 23.14 of NFPA 30 (2012 edition).

(l) *Stormwater management.* Stormwater which collects within the secondary containment must be controlled by a manually operated pump or siphon, or a gravity drain pipe which has a

manually controlled dike valve on the outside of the dike. All pumps, siphons and valves must be properly maintained and kept in good condition. If gravity drain pipes are used, all dike valves must be locked in a closed position except when the operator is in the process of draining clean water from the diked area. 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 Parts 701, 702, 703, and 750 of this Title, as applicable.

613-4.3 Inspections and leak detection.

(a) *General inspection and leak detection requirements.*

(1) A method, or combination of methods, of inspection and leak detection must be provided, that:

(i) can assess the integrity/remaining useful life of, and detect a leak from any portion of the tank and the piping that are in contact with the ground and routinely contain petroleum;

(ii) is performed in accordance with an acceptable code of practice, or 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 under paragraphs (c)(1), and (d)(1), (2), and (3) of this section must be capable of detecting the leak rate or quantity specified for that method with a probability of detection of 95 percent and a probability of false alarm of 5 percent.

(2) If an inspection or method of leak detection that complies with the requirements of this section cannot be implemented, the AST system must be permanently closed in accordance with subdivision 4.5(b) of this Subpart.

(3) If the petroleum stored will change such that the AST system would then be subject to new inspections and tests required under this section, these inspections and tests must be performed before the change occurs.

(b) *Specific inspection and leak detection requirements for tanks and piping.*

(1) *Tank inspection and leak detection.* Tanks must be monitored for leaks as follows:

(i) *Category 1 tanks.*

(a) Except for tanks described under clause (b) of this subparagraph, the following Category 1 tanks must, at least every ten years, have a tank tightness test performed in accordance with paragraph (c)(1) of this section or be inspected in accordance with paragraph (c)(2) of this section:

10,000 gallons; or

(1) tanks that have a design capacity equal to or greater than

(2) tanks that have a design capacity of less than 10,000 gallons and are in close proximity to sensitive receptors. Tanks within 500 horizontal feet of the following resources are considered to be in close proximity to sensitive receptors:

(i) perennial or intermittent streams;

(ii) public or private wells;

(iii) primary or principal aquifers as defined in USGS Water Resource Investigation Reports 87-4274, 87-4275, 87-4276, 87-4122, 88-4076, and Appendix C;

(iv) wetlands as defined in Part 664 of this Title;

(v) lakes/ponds, estuaries, or other similar surface water bodies; or

(vi) storm drains.

(b) No inspections or leak detection is required for Category 1 tanks that are:

(1) entirely aboveground (e.g., a tank on a rack, cradle or stilts); or

(2) part of AST systems storing No. 5 or No. 6 fuel oil.

(c) If any portion of the AST system is not inspected as required, that AST system must be promptly taken out of service in accordance with subdivision 4.5(a) of this Subpart.

(ii) *Category 2 tanks.* Reserved.

(iii) *Category 3 tanks.* Reserved.

(2) *Piping leak detection.* Except for piping described under subparagraph (iii) of this paragraph, piping that is in contact with the ground and routinely contains petroleum must be monitored for leaks as follows:

(i) *Pressurized piping.*

(a) *Category 1 piping.*

(1) Category 1 piping that conveys petroleum under pressure must be equipped with an automatic line leak detector that is operated in accordance with paragraph

(d)(1) of this section or, at least every ten years, have a line tightness test performed in accordance with paragraph (d)(2) of this section.

(2) No leak detection is required for Category 1 piping that conveys petroleum under pressure and is part of AST systems storing No. 5 or No. 6 fuel oil.

(b) *Category 2 piping.* Category 2 piping that conveys petroleum under pressure and is part of AST systems storing motor fuel, must be equipped with an automatic line leak detector that is operated in accordance with paragraph (d)(1) of this section.

(c) *Category 3 piping.* Category 3 piping that conveys petroleum under pressure and is part of AST systems storing motor fuel, must be equipped with an automatic line leak detector that is operated in accordance with paragraph (d)(1) of this section.

(ii) *Suction and gravity-fed piping.*

(a) *Category 1 piping.*

(1) Category 1 piping that conveys petroleum under suction or hydrostatic pressure must, at least every ten years, have a line tightness test performed in accordance with paragraph (d)(2) of this section.

(2) No leak detection is required for Category 1 piping that conveys petroleum under suction or hydrostatic pressure and is part of AST systems storing No. 5 or No. 6 fuel oil.

(b) *Category 2 piping.* Reserved.

(c) *Category 3 piping.* Reserved.

(iii) *Alternative piping leak detection.* Piping that is associated with a field-constructed tank with a design capacity greater than 50,000 gallons, must be monitored for leaks using one of the methods required under paragraph (d)(1) or (d)(2) of this section, as applicable, or have a bulk piping tightness test performed in accordance with paragraph (d)(3) of this section.

(c) *Tank inspection and testing methods.* Tank inspections and tightness testing used to meet the requirements of paragraph (b)(1) must be conducted in accordance with the following:

(1) *Tank tightness testing.*

(i) 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 tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(ii) *Qualifications of test technicians.* 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) *Ten-year inspections.* Ten-year inspections must be conducted in accordance with one of the following codes of practice (refer to section 1.10 of this Part for complete citation of references):

(i) API Standard 653, April 2009;

(ii) STI SP001, September 2011; or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(d) *Piping leak detection methods.* Piping leak detection methods used to meet the requirements of paragraph (b)(2) of this section must be conducted in accordance with the following:

(1) *Automatic line leak detectors.* Methods which indicate 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) Line tightness testing must be capable of detecting a leak at the rate of 0.1 gallon per hour at one and one-half times the operating pressure.

(ii) *Qualifications of test technicians.* 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.

(3) *Bulk piping tightness testing.* Line tightness testing must be performed in accordance with the following:

(i) Line tightness testing is performed semiannually or annually in accordance with subparagraph (d)(2)(ii) of this section.

(ii) Line tightness testing is capable of detecting a leak at the rates in Table 5, at or above the operating pressure:

Piping Segment Volume [gallons]	Semiannual Test [gallons per hour]	Annual Test [gallons per hour]
<50,000	1.0	0.5
≥50,000 to <75,000	1.5	0.75

≥75,000 to <100,000	2.0	1.0
≥100,000	3.0	1.5

(iii) Piping segment volumes ≥100,000 gallons not capable of meeting the maximum 3.0 gallons per hour leak rate (for semiannual testing) may instead be tested at a leak rate up to 6.0 gallons per hour in accordance with the schedule in Table 6:

Test	Due Date	Maximum Leak Detection Rate [gallons per hour]
First test	Not later than October 13, 2018	6.0
Second test	Between October 13, 2018 and October 13, 2021	6.0
Third test	Between October 13, 2021 and October 13, 2022	3.0
Subsequent tests	After October 13, 2022	3.0 (Semiannual Test) or 1.5 (Annual Test) per Table 5

(e) *Recordkeeping.* Records required by this section must meet the following requirements:

(1) Beginning October 17, 2023, the results or records of ten-year inspections must be retained for 20 years or until the inspection following the next inspection, whichever is later.

(2) The results of tightness testing must be retained for ten years or until the next test, whichever is later, and include the following information:

- (i) facility registration number;
- (ii) tank identification number used on the application form required under section 1.9 of this Part for the tank or piping tested;
- (iii) date of test;
- (iv) results of test;
- (v) test method;
- (vi) certification by the technician that the test complies with subparagraph (c)(1)(i), (d)(2)(i), (d)(3)(ii) or (iii) of this section;
- (vii) statement of technician's qualifications;
- (viii) address of technician; and

(ix) signature of technician.

(3) A copy of the results of tightness testing must be submitted to the Department within 30 days after performance of the test(s).

613-4.4 Reporting, investigation, and confirmation.

(a) *Reporting responsibilities.* The reporting requirements of subdivisions (b) and (e) of this section apply to the following persons:

(1) the facility owner;

(2) the tank system owner;

(3) the operator;

(4) the carrier;

(5) any contractor in a contractual relationship with the facility owner, tank system owner, or operator;

(6) any other party and its contractors who have been retained as part of a business transaction relating to the facility;

(7) any person who causes a spill at the facility.

(b) *Reporting of suspected leaks.*

(1) Suspected leaks must be reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and the procedures in subdivision (d) of this section must be followed for any of the following conditions:

(i) the discovery of petroleum outside of an AST system at the facility or in the surrounding area (e.g., the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water);

(ii) unusual operating conditions observed (e.g., the erratic behavior of petroleum dispensing equipment, the sudden loss of petroleum from the AST system, an unexplained presence of water in the tank, or water in the interstitial space of secondarily contained tank system components), unless the tank system component is found to be defective but not leaking, and is immediately repaired or replaced; or

(iii) inspection/monitoring/testing results, including alarms, from an inspection or leak detection method required under subdivisions 4.2(h)(1), and 4.3(a) and (b) of this Subpart which indicate that a leak may have occurred, unless:

(a) the monitoring device is found to be defective, and is immediately repaired, recalibrated, or replaced, and additional monitoring does not confirm the initial result; or

(b) the alarm was investigated and determined to be a non-spill event (e.g., from a power surge or caused by filling the tank during leak detection testing).

(2) When a leak is suspected, or where inspections or tests required by this Part have not been performed, the Department may order the facility to inspect and to test the AST system or equipment for tightness and structural soundness. If the facility fails to conduct such inspections and tests within ten 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.

(c) *Investigation due to off-site impacts.* When required by the Department, the procedures in subdivision (d) of this section must be followed to determine if the AST system is the source of off-site impacts. These impacts include the discovery of petroleum (e.g., the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking waters) that has been observed by the Department or brought to its attention by another party.

(d) *Leak investigation and confirmation steps.* Unless corrective action is initiated in accordance with Subpart 7 of this Part, any leak or suspected leak of petroleum must be investigated using either one of the methods described in paragraph (1) or (2) of this subdivision or another procedure approved by the Department. The investigation must commence immediately following the reporting required under subdivision (b) or (e) of this section. The investigation must be completed, and the results submitted to the Department prior to any repairs and within seven days after the reporting required under subdivision (b) or (e) of this section.

(1) *Inspection or system test.* An inspection or testing must be conducted in accordance with paragraph 4.3(c)(1), (c)(2), or (d)(2) of this Subpart to determine: whether a leak exists in the portion of the AST system (including delivery piping) suspected of leaking; and, in the case of petroleum reaching secondary containment, if a breach of secondary containment occurred.

(i) If the test results indicate that a leak or release has occurred, the leaking AST system must be immediately emptied to prevent further leaks and be:

(a) promptly taken out of service in accordance with subdivision 4.5(a) of this Subpart and repaired in accordance with subdivision 4.2(j) of this Subpart;

(b) replaced; or

(c) permanently closed in accordance with subdivision 4.5(b) of this Subpart.

(ii) If the test results indicate that a release has occurred, corrective action must also begin in accordance with Subpart 7 of this Part.

(iii) If the test results do not indicate that a leak exists but environmental contamination is the basis for suspecting a leak, a site check must be conducted in accordance with paragraph (2) of this subdivision.

(iv) If the test results do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a leak, further investigation is not required.

(2) *Site check.* The presence or absence of a release must be measured where contamination is most likely to be present at the facility. In selecting sample types, sample locations, and measurement methods, the following must also be considered: nature of the type(s) of petroleum previously stored in the AST system; type of initial alarm or cause for suspicion; type of backfill; depth of groundwater; and other factors appropriate for identifying the presence and source of the release.

(i) If the site check results indicate that a release has occurred, corrective action must begin in accordance with Subpart 7 of this Part.

(ii) If the site check results do not indicate that a release has occurred, further investigation is not required.

(e) *Response to spills.*

(1) Releases must be reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and corrective action must begin in accordance with Subpart 7 of this Part.

(2) Spills must be contained and reported to the Department's Spill Hotline (800-457-7362) within two hours after discovery and the procedures in subdivision (d) of this section must be followed, unless the spill meets all of the following conditions:

(i) The spill is known to be less than five gallons in total volume.

(ii) It is contained and under the control of the spiller.

(iii) It has not reached and will not reach the lands or waters of the State.

(iv) It is cleaned up within two hours after discovery.

(v) The component of the AST system (including delivery piping) that leaked is promptly repaired in accordance with subdivision 4.2(j) of this Subpart or replaced.

(3) Leaking AST systems must be immediately emptied to prevent further leaks and be:

(i) promptly taken out of service in accordance with subdivision 4.5(a) of this Subpart and repaired in accordance with subdivision 4.2(j) of this Subpart;

(ii) replaced; or

(iii) permanently closed in accordance with subdivision 4.5(b) of this Subpart.

613-4.5 Out-of-service AST systems and closure.

(a) *Out-of-service AST systems.*

(1) An AST system is out of service if:

(i) the facility owner (or their authorized representative) takes the tank system out of service by submitting an application to the Department, in accordance with subparagraph 1.9(c)(4)(ii) of this Part, indicating that the tank system is out of service; or

(ii) the tank system is no longer receiving or dispensing petroleum. Within 30 days after the tank system no longer receives or dispenses petroleum, the facility owner (or their authorized representative) must submit an application to the Department, in accordance with subparagraph 1.9(c)(4)(ii) of this Part, indicating that the tank system is out of service.

(2) Out-of-service AST systems are still subject to all applicable requirements of this Part, with the exception of periodic operation and maintenance walkthrough inspections and leak detection required under subdivisions 4.2(h), and 4.3(a) and (b) of this Part, respectively, if the AST system is empty. (An AST system is considered empty when all petroleum has been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue remain in the AST system.)

(i) The suspended requirements of subdivisions 4.2(h), and 4.3(a) and (b) of this Subpart must resume in accordance with the original schedule when the AST system is returned to service. However, if the AST system has been out of service such that any of the next periodic testing/monitoring/inspections was not conducted in accordance with the original schedule, the testing/monitoring/inspection must be performed when the AST system is returned to service.

(ii) For AST system taken out of service due to repairs (in response to a leak), the repair and subsequent testing requirements of subparagraph 4.2(j) of this Subpart must be successfully completed before the AST system is returned to service.

(3) When an AST system is out of service for more than 90 days, or has not received or dispensed petroleum in a 90-day period, the following must also be performed:

(i) empty the tank so that no more than 2.5 centimeters (one inch) of residue remains;

(ii) leave vent lines open and functioning; and

(iii) cap and secure all piping, fill ports, gauge openings, vapor returns, pump connections, ancillary equipment, and manways.

(4) When an AST system is out of service for more than 12 months, or has not received or dispensed petroleum in a 12-month period, the AST system must be permanently closed 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 in-service.

(b) *Permanent closure.*

(1) At least 30 days before permanent closure, the facility owner (or their authorized representative) must notify the Department of this action, unless such action is in response to corrective action in accordance with Subpart 7 of this Part.

(2) Within 30 days after permanent closure, the facility owner (or their authorized representative) must submit an application to the Department, in accordance with subparagraph 1.9(c)(7)(ii) of this Part, indicating that the AST system has been permanently closed.

(3) All scheduled deliveries to AST systems that have undergone permanent closure, must be terminated.

(4) *Methods of permanent closure.*

(i) To perform a tank removal, all liquids and accumulated sludge must be removed from the tank system prior to removing the tank from the ground. All lines (including delivery piping) must be either disconnected and removed, or securely capped or plugged. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) PEI RP 1700, 2018 edition; or

(b) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(ii) To perform an in-place closure, all liquids, accumulated sludge, and petroleum vapors must be removed from the tank system prior to stenciling the tank with the date of permanent closure. The tank must be protected from flotation. All lines (including delivery piping) must be either disconnected and removed, or securely capped or plugged, and all manways must be securely fastened in place. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) PEI RP 1700, 2018 edition; or

(b) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(iii) To perform a change-in-service, all liquids, accumulated sludge, and petroleum vapors must be removed from the tank system prior to changing the stored substance. One of the following codes of practice (refer to section 1.10 of this Part for complete citation of references) must be adhered to in order to comply with this paragraph:

(a) API RP 2015, August 2001;

(b) API RP 2016, August 2001;

(c) NFPA 326, 2010 edition; or

(d) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the Department.

(5) AST systems that have been permanently closed may not be returned to service unless all components of the AST system meet applicable requirements for the latest Category.

(c) *Recordkeeping*. Records required by this section must be retained for three years after permanent closure, or until the facility has been permanently closed, whichever is later. Copies of these records must also be submitted to the Department within 30 days after permanent closure and must consist of a report detailing that the tank was permanently closed in accordance with subparagraph (b)(4)(i), (ii), or (iii) of this section.

Subpart 613-5 Hydrant Systems

613-5.1 Tank systems: design, construction, and equipment.

(a) *Applicability.* The provisions of this Subpart apply to hydrant systems.

(b) *Design and equipment requirements for hydrant systems.* Hydrant systems must meet the following requirements:

(1) *Tank requirements.*

(i) *UST systems.* Tanks that are part of UST systems must meet the requirements of paragraph 2.1(b)(1) of this Part, with the exception of the following:

(a) field-constructed tanks with a design capacity greater than 50,000 gallons, which may instead meet the alternative requirements of paragraph 2.1(c)(1) of this Part; and

(b) ASTs, which must instead meet the requirements of paragraph 4.1(b)(1) of this Part.

(ii) *AST systems.* Tanks that are part of AST systems must meet the requirements of paragraph 4.1(b)(1) of this Part, with the exception of USTs, which must instead meet the requirements of paragraph 3.1(b)(1) of this Part.

(2) *Piping and ancillary equipment requirements.* The requirements of this paragraph apply to all piping and ancillary equipment that are in contact with the ground and routinely contains petroleum.

(i) *UST systems.* Piping and ancillary equipment that are part of UST systems must meet the requirements of paragraph 2.1(b)(2) of this Part, with the exception of piping associated with field-constructed tanks with a design capacity greater than 50,000 gallons, which may instead meet the alternative requirements of paragraph 2.1(c)(2) of this Part.

(ii) *AST systems.* Piping and ancillary equipment that are part of AST systems must meet the requirements of paragraph 4.1(b)(2) of this Part, with the exception of piping associated with field-constructed tanks with a design capacity greater than 50,000 gallons, which may instead meet the alternative requirements of paragraph 4.1(c)(2) of this Part.

(3) *Overfill prevention.*

(i) *UST systems.* Tanks that are part of UST systems must meet the requirements of paragraph 2.1(b)(3) of this Part, with the exception of ASTs, which must meet the requirements of paragraph 4.1(b)(3) of this Part.

(ii) *AST systems.* Tanks that are part of AST systems must meet the requirements of paragraph 4.1(b)(3) of this Part, with the exception of USTs, which must meet the requirements of paragraph 3.1(b)(3) of this Part.

(4) *Fill port catch basins.* Except for UST systems filled by transfers of no more than 25 gallons at one time, UST systems must be equipped with a fill port catch basin at every fill port, that will prevent the release of petroleum when the transfer hose is detached from the fill pipe.

(5) *Dispenser systems.* UST systems must be equipped with under-dispenser containment for any new dispenser system that is installed.

(i) A dispenser system is considered new when both the dispenser and the equipment needed to connect the dispenser to the UST system are installed at a facility. The equipment necessary to connect the dispenser to the UST system includes check valves, shear valves, unburied risers or flexible connectors, or other transitional components that are beneath the dispenser and connect the dispenser to the piping.

(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 within it or be continuously electronically monitored for leaks from the dispenser system.

(6) *Valves.* Hydrant systems must be equipped with valves described in this paragraph as applicable.

(i) *Shear valves.* Dispensers of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (*i.e.*, impact valve). Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 4-3.6. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 6.3.9.

(ii) *Solenoid or anti-siphon valves.* Piping and dispensers that are part of hydrant systems storing motor fuel and are at an elevation below the top of the tank, must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. Category 1 and 2 valves must meet the standards set forth in NFPA 30A (1984 edition), section 2-1.7. Category 3 valves must meet the standards set forth in NFPA 30A (2012 edition), section 4.2.4.

(iii) *Backflow check valves.* Delivery piping associated with a pump-filled tank must be equipped with a properly functioning check valve or equivalent device that provides automatic protection against backflow. Check valves are required only when the arrangement of the delivery piping is such that backflow from the receiving tank is possible. For ASTs where loading and unloading is done through a common pipe system, an operating valve accessible to the person responsible for transfer activities, may be used in place of a check valve.

(iv) *Operating valves.* Connections on a tank through which petroleum can normally flow and that have the potential to drain the tank via gravity, must be equipped with an

operating valve to control the flow. Operating valves must be installed as close as practicable to the tank connection.

(7) *Compatibility.* Tank system equipment must be either made of or lined with materials that are compatible with the petroleum stored in the hydrant system.

613-5.2 General installation, operation, and maintenance requirements.

(a) *Installation requirements.*

(1) *UST systems.* Components of UST systems must meet the requirements of subdivision 2.2(a) of this Part, with the exception of ASTs, which must meet the requirements of subdivision 4.2(a) of this Part.

(2) *AST systems.* Components of AST systems must meet the requirements of subdivision 4.2(a) of this Part, with the exception of USTs, which must meet the requirements of subdivision 3.2(a) of this Part.

(b) *As-built information records.* An accurate facility diagram that includes the information specified under subdivision 2.2(a) of this Part for components of UST systems (with the exception of ASTs), must be maintained until the facility has been permanently closed.

(c) *Compatibility with biofuel blends.*

(1) The operator and tank system owner must be able to demonstrate compatibility of every component of a hydrant system storing petroleum containing either greater than ten percent ethanol or greater than 20 percent biodiesel, using one of the following documents:

(i) a certification or listing of the tank system component by a nationally recognized, independent testing laboratory for use with the stored biofuel blend; or

(ii) a written statement of compatibility from the tank system component manufacturer. The manufacturer's statement must be in writing, indicate an affirmative statement of compatibility, and specify the range of biofuel blends with which the equipment or component is compatible.

(2) *Recordkeeping.* Records required by this subdivision must be maintained until the hydrant system is permanently closed in accordance with section 5.6 of this Subpart.

(d) *Spill and overfill prevention.*

(1) *UST systems.* UST systems must meet the requirements of subdivision 2.2(d) of this Part, with the exception of ASTs, which must meet the requirements of subdivision 4.2(d) of this Part.

(2) *AST systems.* AST systems must meet the requirements of subdivision 4.2(d) of this Part, with the exception of USTs, which must meet the requirements of subdivision 3.2(d) of this Part.

(e) *Periodic inspection of overfill prevention equipment.* Overfill prevention equipment associated with USTs that are part of UST systems must meet requirements of subdivision 2.2(e) of this Part.

(f) *Periodic monitoring/testing of fill port catch basins and containment sumps used for interstitial monitoring of piping.* Fill port catch basins and containment sumps used for interstitial monitoring of piping that are associated with USTs that are part of UST systems, must meet the requirements of subdivision 2.2(f) of this Part.

(g) *Leak detection equipment periodic testing.* Leak detection equipment associated with components of UST systems must meet the requirements of subdivision 2.2(g) of this Part, with the exception of such equipment associated with ASTs.

(h) *Periodic operation and maintenance walkthrough inspections.*

(1) *UST systems.*

(i) Walkthrough inspections must be performed for UST systems in accordance with subdivision 2.2(h) of this Part. The inspections must also check the following equipment either every 30 days or annually (if confined space entry is required according to the Occupational Safety and Health Administration):

(a) *Hydrant pits.* Visually check for damage; remove liquid and debris; and check for leaks.

(b) *Hydrant piping vaults.* Check for leaks.

(ii) The requirements of subparagraph (i) of this paragraph do not apply to ASTs, and fill port catch basins, leak detection equipment, and containment sumps, that are associated with ASTs. Such equipment must be inspected in accordance with subdivision 4.2(h) of this Part.

(2) *AST systems.* Walkthrough inspections must be performed for AST systems in accordance with subdivision 4.2(h) of this Part, with the exception of USTs.

(i) *Operation and maintenance of corrosion protection.*

(1) *UST systems.* Metal components of UST systems must meet the requirements of subdivision 2.2(i) of this Part, with the exception of ASTs, which must meet the requirements of subdivision 4.2(i) of this Part.

(2) *AST systems.* Metal components of AST systems must meet the requirements of subdivision 4.2(i) of this Part, with the exception of USTs, which must meet the requirements of subdivision 3.2(i) of this Part.

(j) *Repairs and modifications.*

(1) *UST systems.* Repairs and modifications to UST systems must meet the requirements of subdivision 2.2(j) of this Part, with the exception of those made to ASTs, which must meet the requirements of subdivision 4.2(j) of this Part.

(2) *AST systems.* Repairs and modifications to AST systems must meet the requirements of subdivision 4.2(j) of this Part, with the exception of those made to USTs, which must meet the requirements of subdivision 3.2(j) of this Part.

(k) *Hydrant systems in locations subject to flooding.*

(1) For Category 1 or 2 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water, safeguards must be maintained in accordance with section 2-5.6 of NFPA 30 (1984 edition). If such safeguards include ballasting of a tank 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 tank after the flood must not be discharged to the waters of the State unless the discharge is in conformance with the standards of Parts 701, 702, 703, and 750 of this Title, as applicable.

(2) For Category 3 tanks located in an area where the tank may become buoyant because of a rise in the water table, flooding or accumulation of water from fire suppression operations, uplift protection must be provided in accordance with Sections 22.14 and 23.14 of NFPA 30 (2012 edition).

(l) *Stormwater management.* Stormwater which collects within the secondary containment of ASTs must be controlled by a manually operated pump or siphon, or a gravity drain pipe which has a manually controlled dike valve on the outside of the dike. All pumps, siphons and valves must be properly maintained and kept in good condition. If gravity drain pipes are used, all dike valves must be locked in a closed position except when the operator is in the process of draining clean water from the diked area. 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 Parts 701, 702, 703, and 750 of this Title, as applicable.

613-5.3 Inspections and leak detection.

(a) *UST systems.* Components of UST systems must be monitored for leaks in accordance with section 2.3 of this Part, with the exception of ASTs, which must meet the requirements of section 4.3 of this Part.

(b) *AST systems*. Components of AST systems must be inspected and monitored for leaks in accordance with section 4.3 of this Part, with the exception of USTs, which must meet the requirements of section 3.3 of this Part.

613-5.4 Reporting, investigation, and confirmation.

(a) *UST systems*. Leaks and suspected leaks from UST systems must be reported and addressed in accordance with section 2.4 of this Part, with the exception of those from ASTs, which must meet the requirements of section 4.4 of this Part.

(b) *AST systems*. Leaks and suspected leaks from AST systems must be reported and addressed in accordance with section 4.4 of this Part, with the exception of those from USTs, which must meet the requirements of section 3.4 of this Part.

613-5.5 Operator training.

UST systems must have Class A, Class B, and Class C Operators who meet the requirements of section 2.5 of this Part.

613-5.6 Out-of-service hydrant systems and closure.

(a) *UST systems*. UST systems that are taken out of service or undergo permanent closure, must meet the requirements of section 2.6 of this Part, with the exception of ASTs that undergo such actions, which must meet the requirements of section 4.5 of this Part.

(b) *AST systems*. AST systems that are taken out of service or undergo permanent closure, must meet the requirements of section 4.5 of this Part, with the exception of USTs that undergo such actions, which must meet the requirements of section 3.5 of this Part.

Subpart 613-6 Delivery Prohibition

613-6.1 Circumstances and process for imposing a delivery prohibition.

(a) *Tier 1 conditions.*

(1) When the Department finds that a Tier 1 condition exists at a facility, the Department will attach a tag to every fill port of the relevant tank system.

(2) At the time that it attaches a tag, the Department will provide to the facility owner, tank system owner, or operator, if one is present, a written notification of the imposition of delivery prohibition identifying the relevant condition(s) at the facility. Otherwise, the Department will then send the written notification via certified mail or personal service to the correspondence address listed in the current facility registration or license within five business days following the time that the tag is attached.

(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 a tag will be attached to every fill port of all tank systems that are probable sources of the release.

(ii) A UST system covered under section 2.1(a), 3.1(a)(2), or 5.1(a) of this Part, or a UST that is part of an AST system covered under subdivision 5.1(a) of this Part, is missing one or more of the following equipment:

(a) secondary containment equipment required under:

(1) section 2.1(b)(1)(ii)(e), 2.1(b)(1)(iii)(e), 2.1(b)(2)(iii)(c), 2.1(c)(1)(ii) or (iii), or 2.1(c)(2)(iii) of this Part;

(2) clause 3.1(b)(1)(ii)(e) or 3.1(b)(1)(iii)(e) of this Part; or

(3) subparagraph 5.1(b)(1)(i) or (ii), or 5.1(b)(2)(i) of this Part;

(b) overfill prevention equipment required under paragraph 2.1(b)(3), 3.1(b)(3), or 5.1(b)(3) of this Part;

(c) fill port catch basins required under paragraph 2.1(b)(4) or 5.1(b)(4) of this Part;

(d) cathodic protection equipment required under:

(1) section 2.1(b)(1)(i)(b)(2) or (3), 2.1(b)(1)(ii)(b), 2.1(b)(1)(iii)(b), 2.1(b)(2)(i)(a) or (b), 2.1(b)(2)(iii)(b), 2.1(c)(1)(i), (ii), or (iii), 2.1(c)(2)(i), (ii), or (iii), 3.1(b)(1)(ii)(b),

(2) clause 3.1(b)(1)(iii)(b), 3.1(b)(2)(ii)(b), or 3.1(b)(2)(iii)(b) of this Part; or

(3) subparagraph 5.1(b)(1)(i) or (ii), or 5.1(b)(2)(i) of this Part;

(e) leak detection equipment required under subdivision(s) 2.3(a) and (b), 3.3(a) and (b), or 5.3(a) or (b) of this Part.

(b) *Tier 2 conditions.*

(1) When the Department finds that a Tier 2 condition exists at a facility, the Department may attach a tag to every fill port of the relevant tank system.

(2) Prior to attaching a tag, the Department will send a written statement identifying the relevant condition(s) at the facility. The Department will send the written statement via certified mail or personal service to the correspondence address listed in the current facility registration or license.

(3) At the time that it attaches a tag, the Department will provide to the facility owner, tank system owner, or operator, if one is present, a written notification of the imposition of delivery prohibition identifying the relevant condition(s) at the facility. Otherwise, the Department will then send the written notification via certified mail or personal service to the correspondence address listed in the current facility registration or license within five business days following the time that the tag is attached.

(4) The following are Tier 2 conditions:

(i) The results of the following indicate that the tank system may be leaking petroleum or would not contain a leak if one were to occur, unless documentation acceptable to the Department is submitted within ten days after receipt of the Department's statement issued in accordance with paragraph (2) of this subdivision, demonstrating that the relevant tank system is not leaking or has been appropriately repaired:

(a) monitoring/testing required by subdivision 2.2(f) or 5.2(f) of this Part;

(b) leak detection required by subdivision 2.3(a) and (b), 3.3(a) and (b), or 5.3(a) or (b) of this Part; or

(c) inspections and leak detection required by subdivision 2.2(h), 4.2(h), 4.3(a) and (b), 5.2(h), or 5.3(a) or (b) of this Part.

(ii) With respect to the operation of a UST system covered under section 2.1(a), 3.1(a)(2), or 5.1(a) of this Part, compliance with the following standards is not demonstrated within 30 days following receipt of the Department's statement issued in accordance with paragraph (2) of this subdivision:

(a) spill and overfill prevention operating standards under subdivision 2.2(d), (e), or (f), 3.2(d), or 5.2(d), (e), or (f) of this Part;

(b) cathodic protection operating standards under subdivision 2.2(i), 3.2(i), or 5.2(i) of this Part; or

(c) applicable leak detection methods under subdivision 2.3(c), (d), (e), or (f), 3.3(c) or (d), or 5.3(a) or (b) of this Part.

(iii) A UST system covered under paragraph 3.1(a)(1) or (3) of this Part is missing one or more of the following equipment and installation of the missing component is not documented to the Department within 30 days after receipt of the Department's statement issued in accordance with paragraph (2) of this subdivision:

(a) secondary containment equipment required under clause 3.1(b)(1)(ii)(e) or 3.1(b)(1)(iii)(e) of this Part;

(b) overfill prevention equipment required under paragraph 3.1(b)(3) of this Part;

(c) cathodic protection equipment required under clause 3.1(b)(1)(ii)(b), 3.1(b)(1)(iii)(b), 3.1(b)(2)(ii)(b), or 3.1(b)(2)(iii)(b) of this Part; or

(d) leak detection equipment required under subdivisions 3.3(a) and (b) of this Part.

(iv) An AST system covered under subdivision 4.1(a) or 5.1(a) of this Part, or an AST that is part of a UST system covered under subdivision 5.1(a) of this Part, is missing one or more of the following equipment and installation of the missing equipment is not documented to the Department within 30 days after receipt of the Department's statement issued in accordance with paragraph (2) of this subdivision:

(a) secondary containment equipment required under:

(1) clause 4.1(b)(1)(i)(a), 4.1(b)(1)(ii)(c), or 4.1(b)(1)(iii)(c) of this Part; or

(2) section 5.1(b)(1)(i)(b) or 5.1(b)(1)(ii) of this Part;

(b) overfill prevention equipment required under paragraph 4.1(b)(3) or 5.1(b)(3) of this Part;

(c) corrosion protection equipment required under:

(1) section 4.1(b)(1)(ii)(a)(2) or (3), 4.1(b)(1)(iii)(a)(2) or (3), 4.1(b)(2)(ii)(b), or 4.1(b)(2)(iii)(b) of this Part; or

(2) section 5.1(b)(1)(i)(b), 5.1(b)(1)(ii), or 5.1(b)(2)(ii) of this Part;

(d) leak detection equipment required under subdivision 4.3(a) and (b), or 5.3(a) or (b) of this Part.

(c) The Department may issue the written finding that a Tier 1 or Tier 2 condition exists, in accordance with paragraph (a)(2) or (b)(3) of this section, but withhold the imposition of 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.

613-6.2 Prohibitions.

(a) *Delivery prohibition.* No person may deliver or cause the delivery of petroleum to any tank system whose fill port has a tag attached. No person may accept petroleum to any tank system whose fill port has a tag attached.

(b) *Tag tampering and removal prohibition.* Unless authorized by the Department, no person may tamper with or remove a tag attached to a fill port, or cause such tampering or removal.

613-6.3 Notifications.

(a) *Notice of delivery prohibition to facility and carrier.* The presence of a tag attached to the fill port of a tank system constitutes notice of the delivery prohibition.

(b) *Notification to carrier by facility.* After the Department attaches a tag and prior to the next scheduled delivery of petroleum, all carriers that normally deliver to the tank system must be informed that delivery is prohibited. Records of any correspondence regarding the delivery prohibition must be retained for three years after the imposition of delivery prohibition.

613-6.4 Termination of delivery prohibition.

(a) 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 confirming that the prohibition has been terminated. The Department will send the notification via certified mail or personal service to the correspondence address listed in the current facility registration or license.

(2) *Review of compliance submissions.*

(i) At any time, information may be submitted to the Department demonstrating that the facility is in compliance or the condition(s) that prompted the Department to impose the prohibition has been corrected.

(ii) Upon submission of information to the Department, the Department will designate an individual to review submissions and provide a written decision as set forth below.

(iii) The designated individual will provide a written decision to the facility within five business days after the Department receives the facility's submission. If the designated individual decides to deny 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 designated individual 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.

(3) *Expedited hearing.*

(i) Not later than 15 days after a tag is attached, 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 section 6.1(a)(2) or (b)(3) of this Subpart.

(ii) The Department will bear the burden of proof at the expedited hearing.

(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 Commissioner 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 Commissioner.

(v) The hearing officer may, to the extent practicable and without prejudice to the facility's right to have a timely expedited hearing, consolidate the expedited hearing regarding the existence of Tier 1 or 2 conditions with any hearing regarding the facility's violation of other provisions of the Environmental Conservation Law, or any order, rule, or regulation issued or promulgated thereunder.

(vi) The hearing officer will have the powers and authority provided to a presiding officer under the State Administrative Procedure Act.

(vii) The expedited hearing will be recorded. If requested, the hearing officer will have a typed transcript of the record created.

(viii) 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 the tag, or authorize its removal.

Subpart 613-7 Release Response and Corrective Action

613-7.1 General.

The following persons must, in response to a release at a facility, comply with the requirements of this Subpart:

- (a) the facility owner;
- (b) the tank system owner;
- (c) the operator;
- (d) the carrier, if the carrier is a discharger; and
- (e) any person who is a discharger.

613-7.2 Initial Response.

In response to a release at a facility, the following initial response actions must be performed immediately:

- (a) identify and mitigate fire, explosion, and vapor hazards;
- (b) take immediate action to prevent any further release of petroleum; and
- (c) report the release to Department's Spill Hotline (800-457-7362) within two hours after discovery.

613-7.3 Initial abatement measures and site check.

(a) Unless directed to do otherwise by the Department, the facility must perform the following abatement measures:

- (1) immediately empty the tank system to prevent further release;
- (2) visually inspect any aboveground releases or exposed belowground releases and prevent further petroleum migration;
- (3) continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the excavation zone and entered into subsurface structures (such as sewers or basements);
- (4) remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, the facility must comply with applicable State and local requirements;

(5) measure for the presence of a release where contamination is most likely to be present at the facility, unless the presence and source of the release have been confirmed in accordance with the site check required by section 2.4(d)(2), 3.4(d)(2), 4.4(d)(2), or 5.4(a) or (b) of this Part, or the site assessment required by subdivision 2.6(c) or 5.6(a) of this Part. In selecting sample types, sample locations, and measurement methods, the facility must consider the nature of the petroleum stored, the type of backfill, depth to groundwater and other factors as appropriate for identifying the presence and source of the release; and

(6) investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with section 7.5 of this Subpart.

(b) Within 20 days after release confirmation, the facility must submit:

(1) a report to the Department summarizing the initial abatement steps taken under subdivision (a) of this section; and

(2) any resulting information or data.

613-7.4 Initial site characterization.

(a) Unless directed to do otherwise by the Department, the facility must assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in section 7.3 of this Subpart. This information must include:

(1) data on the nature and estimated quantity of release;

(2) data from available sources and/or site investigations concerning the following factors: surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use;

(3) results of the site check required under section 2.4(d)(2), 3.4(d)(2), 4.4(d)(2), or 5.4(a) or (b) of this Part; and

(4) results of the free product investigations required under section 7.3(a)(6) of this Subpart, to be used by the facility to determine whether free product must be recovered under section 7.5 of this Subpart.

(b) Within 45 days after release confirmation or another reasonable period of time determined by the Department, the facility must submit the information collected in compliance with subdivision (a) of this section to the Department in a manner that demonstrates its applicability and technical adequacy, or in a format and according to the schedule required by the Department.

613-7.5 Free product removal.

At a facility where an investigation under section 7.3(a)(6) of this Subpart indicates the presence of free product, the facility must undertake corrective action to meet the cleanup objectives of Part 611 of this Title. In meeting the requirements of this section, the facility must:

(a) conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the facility, and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, state, and federal regulations;

(b) use abatement of free product migration as a minimum objective for the design of the free product removal system;

(c) handle any flammable products in a safe and competent manner to prevent fires or explosions; and

(d) unless directed to do otherwise by the Department, prepare and submit to the Department, within 45 days after confirming a release, a free product removal report that provides at least the following information:

(1) the name of the person(s) responsible for implementing the free product removal measures;

(2) the estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

(3) the type of free product recovery system used;

(4) whether any discharge will take place on the facility or off the facility during the recovery operation and where this discharge will be located;

(5) the type of treatment applied to, and the effluent quality expected from, any discharge;

(6) the steps that have been or are being taken to obtain necessary permits for any discharge; and

(7) the disposition of the recovered free product.

613-7.6 Investigations for soil and groundwater cleanup.

(a) In order to determine the full extent and location of soils contaminated by the release and the presence and concentrations of dissolved product contamination in the groundwater, the facility must conduct investigations of the release, the release site, and the surrounding area possibly affected by the release if any of the following conditions exist:

(1) there is evidence that groundwater wells have been affected by the release (for example, as found during release confirmation or previous corrective action measures);

(2) free product is found to need recovery in compliance with section 7.5 of this Subpart;

(3) there is evidence that contaminated soils may be in contact with groundwater (for example, as found during conduct of the initial response measures or investigations required under sections 7.2 through 7.5 of this Subpart); and

(4) the Department requests an investigation, based on the potential effects of contaminated soil or groundwater on nearby surface water and groundwater resources.

(b) The facility must submit the information collected under subdivision (a) of this section as soon as practicable or in accordance with a schedule established by the Department.

613-7.7 Corrective action plan.

(a) At any point after reviewing the information submitted in compliance with sections 7.2 through 7.4 of this Subpart, the Department may require the facility to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and groundwater. If a plan is required, the facility must submit the plan according to a schedule and format established by the Department. Alternatively, the facility may, after fulfilling the requirements of sections 7.2 through 7.4 of this Subpart, choose to submit a corrective action plan for responding to contaminated soil and groundwater. In either case, the facility is responsible for submitting a plan that provides for adequate protection of public health and the environment as determined by the Department, and must modify the facility's plan as necessary to meet this standard.

(b) The Department will approve the corrective action plan only after ensuring that implementation of the plan will adequately protect public health, safety, and the environment. In making this determination, the Department will consider the following factors as appropriate:

(1) the physical and chemical characteristics of the petroleum, including its toxicity, persistence, and potential for migration;

(2) the hydrogeologic characteristics of the facility and the surrounding area;

(3) the proximity, quality, and current and future uses of nearby surface water and groundwater;

(4) the potential effects of residual contamination on nearby surface water and groundwater;

(5) an exposure assessment; and

(6) any information assembled in compliance with this Subpart.

(c) Upon approval of the corrective action plan or as directed by the Department, the facility must implement the plan, including modifications to the plan made by the Department. The facility must monitor, evaluate, and report the results of implementing the plan in accordance with a schedule and in a format established by the Department.

(d) The facility may, in the interest of minimizing environmental contamination and promoting more effective cleanup, begin cleanup of soil and groundwater before the corrective action plan is approved provided that the facility:

(1) notifies the Department of the facility's intention to begin cleanup;

(2) complies with any conditions imposed by the Department, including halting cleanup or mitigating adverse consequences from cleanup activities; and

(3) incorporates these self-initiated cleanup measures in the corrective action plan that is submitted to the Department for approval.

613-7.8 Public Participation.

(a) For each confirmed release that requires a corrective action plan, the Department will provide an opportunity for public involvement by those members of the public directly affected by the release and the planned corrective action. This notice may include public notice in local newspapers, block advertisements, public service announcements, e-mail, publication in a State Register, letters to individual households, or personal contacts by field staff.

(b) The Department will ensure that site release information and decisions concerning the corrective action plan are made available to the public for inspection upon request.

(c) Before approving a corrective action plan, the Department may hold a public meeting to consider comments on the proposed corrective action plan if there is sufficient public interest, or for any other reason.

(d) The Department will provide public notice that complies with subdivision (a) of this section if implementation of an approved corrective action plan does not achieve the established cleanup levels in the plan and termination of that plan is under consideration by the Department.

Subpart 613-8 Financial Responsibility

613-8.1 Applicability.

(a) The provisions of this Subpart apply to tank system owners and operators of all UST systems that are subject to Subpart 2 or 5 of this Part, except for the following:

(1) tank system owners and operators of:

(i) UST systems with a storage capacity of 110 gallons or less; or

(ii) wastewater treatment tank systems;

(2) state and federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States.

(b) If the tank system owner and operator of a petroleum underground storage tank are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance.

613-8.2 Definition of terms.

When used in this Subpart, the following terms have the meanings given below:

(a) *Accidental release* means any sudden or non-sudden release of petroleum arising from operating an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank system owner or operator.

(b) *Bodily injury* has the meaning given to this term by applicable state law; however, this term does not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury.

(c) *Chief Financial Officer*, in the case of local government tank system owners and operators, means the individual with the overall authority and responsibility for the collection, disbursement, and use of funds by the local government.

(d) *Controlling interest* means direct ownership of at least 50 percent of the voting stock of another entity.

(e) *Financial reporting year* means the latest consecutive twelve-month period for which any of the following reports used to support a financial test is prepared:

(1) a 10-K report submitted to the SEC;

(2) an annual report of tangible net worth submitted to Dun and Bradstreet; or

(3) annual reports submitted to the Energy Information Administration or the Rural Utilities Service.

This term may comprise a fiscal or a calendar year period.

(f) *Legal defense cost* is any expense that a tank system owner or operator, or provider of financial assurance incurs in defending against claims or actions brought:

(1) by EPA or the state to require corrective action or to recover the costs of corrective action;

(2) by or on behalf of a third party for bodily injury or property damage caused by an accidental release; or

(3) by any person to enforce the terms of a financial assurance mechanism.

(g) *Local government* includes the following:

(1) counties, municipalities, townships, separately chartered and operated special districts (including local government public transit systems and redevelopment authorities), and independent school districts authorized as governmental bodies by state charter or constitution; and

(2) special districts and independent school districts established by counties, municipalities, townships, and other general purpose governments to provide essential services.

(h) *Occurrence* means an accident, including continuous or repeated exposure to conditions, which results in a release from an underground storage tank. This definition is intended to assist in the understanding of these regulations and is not intended either to limit the meaning of “occurrence” in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of “occurrence.”

(i) *Petroleum marketing facilities* include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.

(j) *Property damage* means injury to real or personal property through another’s negligence willful destruction, or by some act of nature. This term does not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage does not include corrective action associated with releases from tanks which are covered by the policy.

(k) *Provider of financial assurance* means an entity that provides financial assurance to a tank system owner or operator of an underground storage tank through one of the mechanisms listed under subdivision 8.4(d) of this Subpart, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state.

Substantial business relationship means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued “incident to that relationship” if it arises from and depends on existing economic transactions between the guarantor and the tank system owner or operator.

(l) *Substantial governmental relationship* means the extent of a governmental relationship necessary under applicable state law to make an added guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued “incident to that relationship” if it arises from a clear commonality of interest in the event of a UST release such as coterminous boundaries, overlapping constituencies, common groundwater aquifer, or other relationship other than monetary compensation that provides a motivation for the guarantor to provide a guarantee.

(m) *Tangible net worth* means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, “assets” means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

(n) *Termination*, per clause 8.4(d)(3)(ii)(a) of this Subpart, means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

613-8.3 Amount and scope of required financial responsibility.

(a) Tank system owners or operators of petroleum underground storage tanks must demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following per-occurrence amounts:

(1) for tank system owners or operators of petroleum underground storage tanks that are located at petroleum marketing facilities, or that handle an average of more than 10,000 gallons of petroleum per month based on annual throughput for the previous calendar year; \$1 million.

(2) for all other tank system owners or operators of petroleum underground storage tanks; \$500,000.

(b) Tank system owners or operators of petroleum underground storage tanks must demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following annual aggregate amounts:

(1) for tank system owners or operators of 1 to 100 petroleum underground storage tanks, \$1 million; and

(2) for tank system owners or operators of 101 or more petroleum underground storage tanks, \$2 million.

(c) For the purposes of paragraphs (b) and (f) of this section, “a petroleum underground storage tank” means a single containment unit and does not mean combinations of single containment units.

(d) Except as provided in paragraph (e) of this section, if the tank system owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for any of the following, the amount of assurance provided by each mechanism or combination of mechanisms must be in the full amount specified in subdivisions (a) and (b) of this section:

(1) taking corrective action;

(2) compensating third parties for bodily injury and property damage caused by sudden accidental releases; or

(3) compensating third parties for bodily injury and property damage caused by non-sudden accidental releases.

(e) If a tank system owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different petroleum underground storage tanks, the annual aggregate required must be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

(f) Tank system owners or operators must review the amount of aggregate assurance provided whenever additional petroleum underground storage tanks are acquired or installed. If the number of petroleum underground storage tanks for which assurance must be provided exceeds 100, the tank system owner or operator must demonstrate financial responsibility in the amount of at least \$2 million of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became effective. If assurance is being demonstrated by a combination of mechanisms, the tank system owner or operator must demonstrate financial responsibility in the amount of at least \$2 million of annual aggregate assurance by the first-occurring effective date anniversary of any one of the mechanisms combined (other than a financial test or guarantee) to provide assurance.

(g) The amounts of assurance required under this section exclude legal defense costs.

(h) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the tank system owner or operator.

613-8.4 Allowable mechanisms and combinations of mechanisms.

(a) A tank system owner or operator, including a local government tank system owner or operator, may use any one or combination of the mechanisms listed under paragraphs (d)(1) through (7) of this section to demonstrate financial responsibility under this Subpart for one or more underground storage tanks.

(b) A local government tank system owner or operator may use any one or combination of the mechanisms listed under paragraphs (d)(8) through (11) of this section to demonstrate financial responsibility under this Subpart for one or more underground storage tanks.

(c) A tank system owner or operator may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this rule, the financial statements of the tank system owner or operator are not consolidated with the financial statements of the guarantor.

(d) *Mechanisms of financial responsibility.*

(1) *Financial test of self-insurance.*

(i) A tank system owner or operator, and/or guarantor, may satisfy the requirements of section 8.3 of this Subpart by passing a financial test as specified in this paragraph. To pass the financial test of self-insurance, the tank system owner or operator, and/or guarantor must meet the criteria of subparagraph (ii) of this paragraph based on year-end financial statements for the latest completed fiscal year.

(ii) The tank system owner or operator, and/or guarantor, must have a tangible net worth of at least ten times the total of the applicable aggregate amount required by section 8.3 of this Subpart, based on the number of underground storage tanks for which a financial test is used to demonstrate financial responsibility to the Department.

(iii) To demonstrate that it meets the financial test under subparagraph (ii) of this paragraph, the chief financial officer of the tank system owner or operator, or guarantor, must sign, within 120 days after the close of each financial reporting year, as defined by the twelve-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer

I am the chief financial officer of [insert: name and address of the tank system owner or operator, or guarantor]. This letter is in support of the use of [insert: "the financial test of self-insurance," and/or "guarantee"] to demonstrate financial responsibility for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"] caused by [insert: "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating (an) underground storage tank(s).

Underground storage tanks at the following facilities are assured by this financial test or a financial test under an authorized State program by this [insert: "owner or operator," and/or "guarantor"]: [List for each facility: the name and address of the facility where tanks assured by this financial test are located. If separate mechanisms or combinations of mechanisms are being used to assure any of the tanks at this facility, list each tank assured by this financial test by the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part.]

	Amount
Closure	\$
Post-Closure Care	\$
Liability Coverage	\$
Corrective Action	\$
Total	\$

This [insert: "owner or operator," or "guarantor"] has not received an adverse opinion, a disclaimer of opinion, or a "going concern" qualification from an independent auditor on his financial statements for the latest completed fiscal year.

1. Amount of annual UST aggregate coverage being assured by a financial test, and/or guarantee	\$
2. Amount of corrective action, closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test, and/or guarantee	\$
3. Sum of lines 1 and 2	\$
4. Total tangible assets	\$
5. Total liabilities [if any of the amount reported on line 3 is included in total liabilities, you may deduct that amount from this line and add that amount to line 6]	\$
6. Tangible net worth [subtract line 5 from line 4]	\$
7. Is line 6 at least \$10 million?	Yes / No
8. Is line 6 at least 10 times line 3?	Yes / No
9. Have financial statements for the latest fiscal year been filed with the Securities and Exchange Commission?	Yes / No
10. Have financial statements for the latest fiscal year been filed with the Energy Information Administration?	Yes / No
11. Have financial statements for the latest fiscal year been filed with the Rural Utilities Service?	Yes / No
12. Has financial information been provided to Dun and Bradstreet, and has Dun and Bradstreet provided a financial strength rating of 4A or 5A? [Answer "Yes" only if both criteria have been met.]	Yes / No

I hereby certify that the wording of this letter is identical to the wording specified in 6 NYCRR 613-8.4(d)(1)(iv) as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

(iv) If a tank system owner or operator using the test to provide financial assurance finds that they no longer meet the requirements of the financial test based on the year-end financial statements, the tank system owner or operator must obtain alternative coverage within 150 days after the end of the year for which financial statements have been prepared.

(v) The Commissioner of the Department may require reports of financial condition at any time from the tank system owner or operator, and/or guarantor. If the Commissioner finds, on the basis of such reports or other information, that the tank system owner or operator, and/or guarantor, no longer meets the financial test requirements of subparagraphs (ii) and (iii) of this paragraph, the tank system owner or operator must obtain alternate coverage within 30 days after notification of such a finding.

(vi) If the tank system owner or operator fails to obtain alternate assurance within 150 days after finding that they no longer meet the requirements of the financial test based on the year-end financial statements, or within 30 days after notification by the Commissioner of the Department that they no longer meet the requirements of the financial test, the tank system owner or operator must notify the Commissioner of such failure within ten days.

(2) *Guarantee.*

(i) A tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by obtaining a guarantee that meets the requirements of this section. The guarantor must be a firm that:

(a) possesses a controlling interest in the tank system owner or operator;

(b) possesses a controlling interest in a firm described under clause (a) of this subparagraph;

(c) is controlled through stock ownership by a common parent firm described under clause (a) of this subparagraph; or,

(d) is engaged in a substantial business relationship with the tank system owner or operator and issuing the guarantee as an act incident to that business relationship.

(ii) Within 120 days after the close of each financial reporting year, the guarantor must demonstrate that it meets the financial test criteria of paragraph (1) of this subdivision based on year-end financial statements for the latest completed financial reporting year, by completing the letter from the chief financial officer described in subparagraph (1)(iii) of this subdivision and delivering the letter to the tank system owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, the guarantor must send notice to the tank system owner or operator by certified mail within 120 days after the end of that financial reporting year and before cancellation or nonrenewal of the guarantee. If the Commissioner of the Department notifies the guarantor that they no longer meet the requirements of the financial test of subparagraphs (1)(ii) and (iii) of this subdivision, the guarantor must notify the tank system owner or operator within ten days after receiving such notification from the Commissioner. In both cases, the guarantee will terminate no less than 120 days after the date the tank system owner or operator receives the notification, as evidenced by the return receipt. The tank system owner or operator must obtain alternative coverage as specified in paragraph 8.7(c)(5) of this Subpart.

(iii) The guarantee must be worded as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Guarantee

Guarantee made this [date] by [name of guaranteeing entity], a business entity organized under the laws of the state of [name of state], herein referred to as guarantor, to [the state implementing agency] and to any and all third parties, and obligees, on behalf of [tank system owner or operator] of [business address].

Recitals.

(1) Guarantor meets or exceeds the financial test criteria of 6 NYCRR 613-8.4(d)(1)(ii) and (iii), and agrees to comply with the requirements for guarantors as specified in 6 NYCRR 613-8.4(d)(2)(ii).

(2) [Tank system owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part, and the name and address of the facility.] This guarantee satisfies 6 NYCRR 613-8 requirements for assuring funding for [insert: “taking corrective action” and/or “compensating third parties for bodily injury and property damage caused by” either “sudden accidental releases” or “non-sudden accidental releases” or “accidental releases”; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the above-identified underground storage tank(s) in the amount of [insert dollar amount] per occurrence and [insert dollar amount] annual aggregate.

(3) *[Insert appropriate phrase: “On behalf of our subsidiary” (if guarantor is corporate parent of the tank system owner or operator); “On behalf of our affiliate” (if guarantor is a related firm of the tank system owner or operator); or “Incident to our business relationship with” (if guarantor is providing the guarantee as an incident to a substantial business relationship with tank system owner or operator)] [tank system owner or operator], guarantor guarantees to [implementing agency] and to any and all third parties that:*

In the event that [tank system owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and the [Commissioner of the Department] has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon instructions from the [Commissioner], shall fund a standby trust fund in accordance with the provisions of 6 NYCRR 613-8.7(a), in an amount not to exceed the coverage limits specified above.

In the event that the [Commissioner] determines that [tank system owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with 6 NYCRR 613-7, the guarantor upon written instructions from the [Commissioner] shall fund a standby trust in accordance with the provisions of 6 NYCRR 613-8.7(a), in an amount not to exceed the coverage limits specified above.

If [tank system owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by [“sudden” and/or “non-sudden”] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the [Commissioner], shall fund a standby trust in accordance with the provisions of 6 NYCRR 613-8.7(a) to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

(4) *Guarantor agrees that if, at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet the financial test criteria of 6 NYCRR 613-8.4(d)(1)(ii) and (iii), guarantor shall send within 120 days after such failure, by certified mail, notice to [tank system owner or operator]. The guarantee will terminate 120 days after the date of receipt of the notice by [tank system owner or operator], as evidenced by the return receipt.*

(5) *Guarantor agrees to notify [tank system owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within ten days after commencement of the proceeding.*

(6) *Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [tank system owner or operator] pursuant to 6 NYCRR 613.*

(7) *Guarantor agrees to remain bound under this guarantee for so long as [tank system owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR 613-8 for the above-identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [tank system owner or operator], such cancellation to*

become effective no earlier than 120 days after receipt of such notice by [tank system owner or operator], as evidenced by the return receipt.

(8) The guarantor's obligation does not apply to any of the following:

(a) any obligation of [insert tank system owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) bodily injury to an employee of [insert tank system owner or operator] arising from, and in the course of, employment by [insert tank system owner or operator];

(c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) property damage to any property owned, rented, loaded to, in the care, custody, or control of, or occupied by [insert tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or

(e) bodily damage or property damage for which [insert tank system owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.

(9) Guarantor expressly waives notice of acceptance of this guarantee by [the implementing agency], by any or all third parties, or by [tank system owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR 613-8.4(d)(2)(iii) as such regulations were constituted on the effective date shown immediately below.

Effective date:

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

(iv) A tank system owner or operator who uses a guarantee to satisfy the requirements of section 8.3 of this Subpart must establish a standby trust fund when the guarantee is obtained. Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee will be deposited directly into the standby trust fund in accordance with

instructions from the Commissioner of the Department under subdivision 8.7(a) of this Subpart. This standby trust fund must meet the requirements specified in paragraph (7) of this subdivision.

(3) *Insurance and risk retention group coverage.*

(i) A tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by obtaining liability insurance that meets the requirements of this section from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.

(ii) Each insurance policy must be amended by an endorsement worded as specified in clause (a) of this subparagraph, or evidenced by a certificate of insurance worded as specified in clause (b) of this subparagraph, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

(a) Endorsement.

Name: [name of each covered location]

Address: [address of each covered location]

Policy Number:

Period of Coverage: [current policy period]

Address of [Insurer or Risk Retention Group]:

Name of Insured:

Address of Insured:

Endorsement:

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering the following underground storage tanks: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part and the name and address of the facility.] for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the “each Occurrence” and “annual aggregate” limits of the Insurer’s or Group’s liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/ or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e);

a. Bankruptcy or insolvency of the insured shall not relieve the [“Insurer” or “Group”] of its obligations under the policy to which this endorsement is attached.

b. The [“Insurer” or “Group”] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the [“Insurer” or “Group”]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms listed under 6 NYCRR 613-8.4(d)(1)-(6) and (8)-(11).

c. Whenever requested by [a Commissioner of an implementing agency], the [“Insurer” or “Group”] agrees to furnish to [the Commissioner] a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the [“Insurer” or “Group”], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-payment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of ten days after a copy of such written notice is received by the insured.

[Insert for claims-made policies]:

e. The insurance covers claims otherwise covered by the policy that are reported to the [“Insurer” or “Group”] within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in 6 NYCRR 613-8.4(d)(3)(ii)(a) and that the [“Insurer” or “Group”] is [“licensed to transact the business of

insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states”].

[Signature of authorized representative of Insurer or Risk Retention Group]

[Name of person signing]

[Title of person signing], Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

(b) Certificate of Insurance.

Name: [name of each covered location]

Address: [address of each covered location]

Policy Number:

Endorsement (if applicable):

Period of Coverage: [current policy period]

Name of [Insurer or Risk Retention Group]:

Address of [Insurer or Risk Retention Group]:

Name of Insured:

Address of Insured:

Certification:

1. *[Name of Insurer or Risk Retention Group], [the “Insurer” or “Group”], as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):*

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part and the name and address of the facility.] for [insert: “taking corrective action” and/or “compensating third parties for bodily injury and property damage caused by” either “sudden accidental releases” or “non-sudden accidental releases” or “accidental releases”; in accordance with and subject to the limits of liability, exclusions, conditions, and other terms of the policy; if coverage is different for

different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the “each occurrence” and “annual aggregate” limits of the Insurer’s or Group’s liability; if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs, which are subject to a separate limit under the policy. This coverage is provided under [policy number]. The effective date of said policy is [date].

2. The [“Insurer” or “Group”] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the [“Insurer” or “Group”] of its obligations under the policy to which this certificate applies.

b. The [“Insurer” or “Group”] is liable for the payment of amounts within any deductible applicable to the policy to the provider of corrective action or a damaged third-party, with a right of reimbursement by the insured for any such payment made by the [“Insurer” or “Group”]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 6 NYCRR 613-8.4(d)(1)-(6) and (8)-(11).

c. Whenever requested by [a Commissioner of an implementing agency], the [“Insurer” or “Group”] agrees to furnish to [the Commissioner] a signed duplicate original of the policy and all endorsements.

d. Cancellation or any other termination of the insurance by the [“Insurer” or “Group”], except for nonpayment of premium or misrepresentation by the insured, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the insured. Cancellation for non-payment of premium or misrepresentation by the insured will be effective only upon written notice and only after expiration of a minimum of ten days after a copy of such written notice is received by the insured.

[Insert for claims-made policies:

e. The insurance covers claims otherwise covered by the policy that are reported to the [“Insurer” or “Group”] within six months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or a retroactive date earlier than that of the prior policy, and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable, and prior to such policy renewal or termination date. Claims reported during such extended reporting period are subject to the terms, conditions, limits, including limits of liability, and exclusions of the policy.]

I hereby certify that the wording of this instrument is identical to the wording in 6 NYCRR 613-8.4(d)(3)(ii)(b) and that the [“Insurer” or “Group”] is [“licensed to transact the business of

insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states”].

[Signature of authorized representative of Insurer]

[Type name]

[Title], Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

(iii) Each insurance policy must be issued by an insurer or a risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

(4) *Surety bond.*

(i) A tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by obtaining a surety bond that meets the requirements of this section. The surety company issuing the bond must be among those listed as acceptable sureties on federal bonds in the latest Circular 570 of the U.S. Department of the Treasury.

(ii) The surety bond must be worded as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Performance Bond

Date bond executed:

Period of coverage:

Principal: [legal name and business address of tank system owner or operator]

Type of organization: [insert “individual,” “joint venture,” “partnership,” or “corporation”]

State of incorporation (if applicable):

Surety(ies): [name(s) and business address(es)]

Scope of Coverage: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Subpart and the name and address of the facility. List the coverage guaranteed by the bond: “taking corrective action” and/or “compensating third parties for bodily injury and property

damage caused by” either “sudden accidental releases” or “non-sudden accidental releases” or “accidental releases” “arising from operating the underground storage Tank”].

Penal sums of bond:

Per occurrence \$

Annual aggregate \$

Surety’s bond number:

Know All Persons by These Presents, that we, the Principal and Surety(ies), hereto are firmly bound to [the implementing agency], in the above penal sums for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sums jointly and severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sums.

Whereas said Principal is required under 6 NYCRR 613-1.16 to provide financial assurance for [insert: “taking corrective action” and/or “compensating third parties for bodily injury and property damage caused by” either “sudden accidental releases” or “non-sudden accidental releases” or “accidental releases”; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tanks identified above, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of the obligation are such that if the Principal shall faithfully [“take corrective action, in accordance with 6 NYCRR 613-7 and the Commissioner of the state implementing agency’s instructions for,” and/or “compensate injured third parties for bodily injury and property damage caused by” either “sudden accidental releases” or “non-sudden accidental releases” or “accidental releases”] arising from operating the tank(s) identified above, or if the Principal shall provide alternate financial assurance, as specified in 6 NYCRR 613-8, within 120 days after the date the notice of cancellation is received by the Principal from the Surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

Such obligation does not apply to any of the following:

(a) any obligation of [insert tank system owner or operator] under a workers’ compensation, disability benefits, or unemployment compensation law or other similar law;

(b) bodily injury to an employee of [insert tank system owner or operator] arising from, and in the course of, employment by [insert tank system owner or operator];

(c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or

(e) bodily injury or property damage for which [insert tank system owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by [the Commissioner of the Department] that the Principal has failed to [“take corrective action, in accordance with 6 NYCRR 613-7 and the Commissioner’s instructions,” and/or “compensate injured third parties”] as guaranteed by this bond, the Surety(ies) shall either perform [“corrective action in accordance with 6 NYCRR 613 and the Commissioner’s instructions,” and/or “third-party liability compensation”] or place funds in an amount up to the annual aggregate penal sum into the standby trust fund as directed by [the Regional Administrator or the Commissioner] under 6 NYCRR 613-8.7(a).

Upon notification by [the Commissioner] that the Principal has failed to provide alternate financial assurance within 60 days after the date the notice of cancellation is received by the Principal from the Surety(ies) and that [the Commissioner] has determined or suspects that a release has occurred, the Surety(ies) shall place funds in an amount not exceeding the annual aggregate penal sum into the standby trust fund as directed by [the Commissioner] under 6 NYCRR 613-8.7(a).

The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the annual aggregate to the penal sum shown on the face of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal, as evidenced by the return receipt.

The Principal may terminate this bond by sending written notice to the Surety(ies).

In Witness Whereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 6 NYCRR 613-8.4(d)(4)(ii) as such regulations were constituted on the date this bond was executed.

Principal

[Signature(s)]

[Names(s)]

[Title(s)]

[Corporate seal]

Corporate Surety(ies)

[Name and address]

[State of Incorporation:]

[Liability limit: \$]

[Signature(s)]

[Names(s) and title(s)]

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: \$

(iii) Under the terms of the bond, the surety will become liable on the bond obligation when the tank system owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate penal sums.

(iv) The tank system owner or operator who uses a surety bond to satisfy the requirements of section 8.3 of this Subpart must establish a standby trust fund when the surety bond is acquired. Under the terms of the bond, all amounts paid by the surety under the bond will be deposited directly into the standby trust fund in accordance with instructions from the

Commissioner under subdivision 8.7(a) of this Subpart. This standby trust fund must meet the requirements specified in paragraph (7) of this subdivision.

(5) *Letter of credit.*

(i) A tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by obtaining an irrevocable standby letter of credit that meets the requirements of this section. The issuing institution must be an entity that has the authority to issue letters of credit in each state where used and whose letter-of-credit operations are regulated and examined by a federal or state agency.

(ii) The letter of credit must be worded as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Irrevocable Standby Letter of Credit

[Name and address of issuing institution]

[Name and address of Commissioner(s) of state implementing agency(ies)]

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. [_____] in your favor, at the request and for the account of [tank system owner or operator name] of [address] up to the aggregate amount of [in words] U.S. dollars (\$[insert dollar amount]), available upon presentation [insert, if more than one Commissioner of a state implementing agency is a beneficiary, "by any one of you"] of (1) your sight draft, bearing reference to this letter of credit, No. [_____] and (2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of 6 NYCRR 613-1.16."

This letter of credit may be drawn on to cover [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"] arising from operating the underground storage tank(s) identified below in the amount of [in words] \$[insert dollar amount] per occurrence and [in words] \$[insert dollar amount] annual aggregate:

[List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part, and the name and address of the facility.]

The letter of credit may not be drawn on to cover any of the following:

(a) any obligation of [insert tank system owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) bodily injury to an employee of [insert tank system owner or operator] arising from, and in the course of, employment by [insert tank system owner or operator];

(c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or

(e) bodily injury or property damage for which [insert tank system owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.

This letter of credit is effective as of [date] and shall expire on [date], but such expiration date shall be automatically extended for a period of [at least the length of the original term] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify [tank system owner or operator] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that [tank system owner or operator] is so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by [tank system owner or operator], as shown on the signed return receipt.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [tank system owner or operator] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in 6 NYCRR-8.4(d)(5)(ii) as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert “the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce,” or “the Uniform Commercial Code”].

(iii) A tank system owner or operator who uses a letter of credit to satisfy the requirements of section 8.3 of this Subpart must also establish a standby trust fund when the letter of credit is acquired. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Commissioner of the Department will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Commissioner under subdivision 8.7(a) of this Subpart. This standby trust fund must meet the requirements specified in paragraph (7) of this subdivision.

(iv) The letter of credit must be irrevocable with a term specified by the issuing institution. The letter of credit must provide that credit be automatically renewed for the same term as the original term, unless, at least 120 days before the current expiration date, the issuing institution notifies the tank system owner or operator by certified mail of its decision not to renew the letter of credit. Under the terms of the letter of credit, the 120 days will begin on the date when the tank system owner or operator receives the notice, as evidenced by the return receipt.

(6) *Trust fund.*

(i) A tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by establishing a trust fund that meets the requirements of this section. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(ii) The wording of the trust agreement must be identical to the wording specified in clause (7)(ii)(a) of this subdivision, and must be accompanied by a formal certification of acknowledgement as specified in clause (7)(ii)(b) of this subdivision.

(iii) The trust fund, when established, must be funded for the full required amount of coverage, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining required coverage.

(iv) If the value of the trust fund is greater than the required amount of coverage, the tank system owner or operator may submit a written request to the Commissioner of the Department for release of the excess.

(v) If other financial assurance as specified in this Subpart is substituted for all or part of the trust fund, the tank system owner or operator may submit a written request to the Commissioner of the Department for release of the excess.

(vi) Within 60 days after receiving a request from the tank system owner or operator for release of funds as specified in subparagraph (iv) or (v) of this paragraph, the Commissioner of the Department will instruct the trustee to release to the tank system owner or operator such funds as the Commissioner specifies in writing.

(7) *Standby trust fund.*

(i) A tank system owner or operator using any one of the mechanisms authorized by paragraph (2), (4), or (5) of this subdivision must establish a standby trust fund when the mechanism is acquired. The trustee of the standby trust fund must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(ii) (a) The standby trust agreement, or trust agreement, must be worded as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Trust Agreement

Trust agreement, the “Agreement,” entered into as of [date] by and between [name of the tank system owner or operator], a [name of state] [insert “corporation,” “partnership,” “association,” or “proprietorship”], the “Grantor,” and [name of corporate trustee], [insert “Incorporated in the state of _____” or “a national bank”], the “Trustee.” Whereas, the United States Environmental Protection Agency, “EPA,” an agency of the United States Government, has established certain regulations applicable to the Grantor, requiring that the owner or operator of an underground storage tank shall provide assurance that funds will be available when needed for corrective action and third-party compensation for bodily injury and property damage caused by sudden and non-sudden accidental releases arising from the operation of the underground storage tank. The attached Schedule A lists the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located that are covered by the [insert “standby” where trust agreement is standby trust agreement] trust agreement.

[Whereas, the Grantor has elected to establish [insert either “a guarantee,” “surety bond,” or “letter of credit”] to provide all or part of such financial assurance for the underground storage tanks identified herein and is required to establish a standby trust fund able to accept payments from the instrument (This paragraph is only applicable to the standby trust agreement.);

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee;

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions

As used in this Agreement:

(a) The term “Grantor” means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term “Trustee” means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of the Financial Assurance Mechanism

This Agreement pertains to the [identify the financial assurance mechanism, either a guarantee, surety bond, or letter of credit, from which the standby trust fund is established to receive payments (This paragraph is only applicable to the standby trust agreement.)].

Section 3. Establishment of Fund

The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of [implementing agency]. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. [The Fund is established initially as a standby to receive payments and shall not consist of any property.] Payments made by the provider of financial assurance pursuant to [the Commissioner of the Department's] instruction are transferred to the Trustee and are referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor as provider of financial assurance, any payments necessary to discharge any liability of the Grantor established by [the state implementing agency]

Section 4. Payment for ["Corrective Action" and/or "Third-Party Liability Claims"]

The Trustee shall make payments from the Fund as [the Commissioner of the Department] shall direct, in writing, to provide for the payment of the costs of [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"] arising from operating the tanks covered by the financial assurance mechanism identified in this Agreement.

The Fund may not be drawn upon to cover any of the following:

- (a) any obligation of [insert tank system owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;*
- (b) bodily injury to an employee of [insert tank system owner or operator] arising from, and in the course of employment by [insert tank system owner or operator];*
- (c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;*
- (d) property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or*
- (e) bodily injury or property damage for which [insert tank system owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.*

The Trustee shall reimburse the Grantor, or other persons as specified by [the Commissioner], from the Fund for corrective action expenditures and/or third-party liability claims in such amounts as [the Commissioner] shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as [the Commissioner] specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund

Payments made to the Trustee for the Fund shall consist of cash and securities acceptable to the Trustee.

Section 6. Trustee Management

The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiaries and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) securities or other obligations of the Grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a–2(a), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(ii) the Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the federal or state government; and

(iii) the Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment

The Trustee is expressly authorized in its discretion:

(a) to transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) to purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a–1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee

Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) to sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) to make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) to register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) to deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(e) to compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses

All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Advice of Counsel

The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any questions arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee Compensation

The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. Successor Trustee

The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the Grantor and the present Trustee by certified mail ten days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 13. Instructions to the Trustee

All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule B or such other designees as the Grantor may designate by amendment to Schedule B. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by [the Commissioner of the Department] to the Trustee shall be in writing, signed by [the Commissioner], and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or [the Commissioner] hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or [the Commissioner], except as provided for herein.

Section 14. Amendment of Agreement

This Agreement may be amended by an instrument in writing executed by the Grantor and the Trustee, or by the Trustee and [the Commissioner of the Department] if the Grantor ceases to exist.

Section 15. Irrevocability and Termination

Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written direction of the Grantor and the Trustee, or by the Trustee and [the Commissioner of the Department], if the

Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 16. Immunity and Indemnification

The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or [the Commissioner of the Department] issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 17. Choice of Law

This Agreement shall be administered, construed, and enforced according to the laws of the state of [insert name of state], or the Comptroller of the Currency in the case of National Association banks.

Section 18. Interpretation

As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals (if applicable) to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in 6 NYCRR 613-8.4(d)(7)(ii)(a) as such regulations were constituted on the date written above.

[Signature of Grantor]

[Name of the Grantor]

[Title]

Attest:

[Signature of Trustee]

[Name of the Trustee]

[Title]

[Seal]

[Signature of Witness]

[Name of the Witness]

[Title]

[Seal]

(b) The standby trust agreement, or trust agreement must be accompanied by a formal certification of acknowledgement similar to the following.

State of New York

County of [New York county]

On this [date], before me personally came [tank system owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Commissioners of said corporation; and that she/he signed her/ his name thereto by like order.

[Signature of Notary Public]

[Name of Notary Public]

(iii) The Commissioner of the Department will instruct the trustee to refund the balance of the standby trust fund to the provider of financial assurance if the Commissioner determines that no additional corrective action costs or third-party liability claims will occur as a result of a release covered by the financial assurance mechanism for which the standby trust fund was established.

(iv) A tank system owner or operator may establish one trust fund as the depository mechanism for all funds assured in compliance with this rule.

(8) Local government bond rating test.

(i) A general-purpose local government tank system owner or operator and/or local government serving as a guarantor may satisfy the requirements of section 8.3 of this Subpart by having a currently outstanding issue or issues of general obligation bonds of \$1 million or more, excluding refunded obligations, with a Moody's rating of Aaa, Aa, A, or Baa, or a Standard & Poor's rating of AAA, AA, A, or BBB. Where a local government has multiple outstanding issues, or where a local government's bonds are rated by both Moody's and Standard and Poor's, the lowest rating must be used to determine eligibility. Bonds that are

backed by credit enhancement other than municipal bond insurance may not be considered in determining the amount of applicable bonds outstanding.

(ii) A local government tank system owner or operator or local government serving as a guarantor that is not a general-purpose local government and does not have the legal authority to issue general obligation bonds may satisfy the requirements of section 8.3 of this Subpart by having a currently outstanding issue or issues of revenue bonds of \$1 million or more, excluding refunded issues, and by also having a Moody's rating of Aaa, Aa, A, or Baa, or a Standard & Poor's rating of AAA, AA, A, or BBB as the lowest rating for any rated revenue bond issued by the local government. Where bonds are rated by both Moody's and Standard & Poor's, the lower rating for each bond must be used to determine eligibility. Bonds that are backed by credit enhancement may not be considered in determining the amount of applicable bonds outstanding.

(iii) The local government tank system owner or operator and/or guarantor must maintain a copy of its bond rating published within the last 12 months by Moody's or Standard & Poor's.

(iv) To demonstrate that it meets the local government bond rating test, the chief financial officer of a general-purpose local government tank system owner or operator and/or guarantor must sign a letter worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer

I am the chief financial officer of [insert: name and address of local government tank system owner or operator, or guarantor]. This letter is in support of the use of the bond rating test to demonstrate financial responsibility for [insert: "taking corrective action" and/ or "compensating third parties for bodily injury and property damage"] caused by [insert: "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating (an) underground storage tank(s).

Underground storage tanks at the following facilities are assured by this bond rating test: [List for each facility: the name and address of the facility where tanks are assured by the bond rating test].

The details of the issue date, maturity, outstanding amount, bond rating, and bond rating agency of all outstanding bond issues that are being used by [name of local government tank system owner or operator, or guarantor] to demonstrate financial responsibility are as follows:

<i>Issue date</i>	<i>Maturity date</i>	<i>Outstanding amount</i>	<i>Bond rating</i>	<i>Rating agency</i>
			<i>[Moody's or Standard & Poor's]</i>	

The total outstanding obligation of [insert amount], excluding refunded bond issues, exceeds the minimum amount of \$1 million. All outstanding general obligation bonds issued by

this government that have been rated by Moody's or Standard & Poor's are rated as at least investment grade (Moody's Baa or Standard & Poor's BBB) based on the most recent ratings published within the last 12 months. Neither rating service has provided notification within the last 12 months of downgrading of bond ratings below investment grade or of withdrawal of bond rating other than for repayment of outstanding bond issues.

I hereby certify that the wording of this letter is identical to the wording specified in 6 NYCRR 613-8.4(d)(8)(iv) as such regulations were constituted on the date shown immediately below.

[Date]

[Signature]

[Name]

[Title]

(v) To demonstrate that it meets the local government bond rating test, the chief financial officer of local government tank system owner or operator and/or guarantor other than a general-purpose government must sign a letter worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer

I am the chief financial officer of [insert: name and address of local government tank system owner or operator, or guarantor]. This letter is in support of the use of the bond rating test to demonstrate financial responsibility for [insert: "taking corrective action" and/ or "compensating third parties for bodily injury and property damage"] caused by [insert: "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating (an) underground storage tank(s). This local government is not organized to provide general governmental services and does not have the legal authority under state law or constitutional provisions to issue general obligation debt.

Underground storage tanks at the following facilities are assured by this bond rating test: [List for each facility: the name and address of the facility where tanks are assured by the bond rating test].

The details of the issue date, maturity, outstanding amount, bond rating, and bond rating agency of all outstanding revenue bond issues that are being used by [name of local government tank system owner or operator, or guarantor] to demonstrate financial responsibility are as follows:

<i>Issue date</i>	<i>Maturity date</i>	<i>Outstanding amount</i>	<i>Bond rating</i>	<i>Rating agency</i>
			<i>[Moody's or Standard & Poor's]</i>	

The total outstanding obligation of [insert amount], excluding refunded bond issues, exceeds the minimum amount of \$1 million. All outstanding revenue bonds issued by this government that have been rated by Moody's or Standard & Poor's are rated as at least investment grade (Moody's Baa or Standard & Poor's BBB) based on the most recent ratings published within the last 12 months. The revenue bonds listed are not backed by third-party credit enhancement or insured by a municipal bond insurance company. Neither rating service has provided notification within the last 12 months of downgrading of bond ratings below investment grade or of withdrawal of bond rating other than for repayment of outstanding bond issues.

I hereby certify that the wording of this letter is identical to the wording specified in 6 NYCRR 613-8.4(d)(8)(v) as such regulations were constituted on the date shown immediately below.

[Date]

[Signature]

[Name]

[Title]

(vi) The Commissioner of the Department may require reports of financial condition at any time from the local government tank system owner or operator, and/or local government guarantor. If the Commissioner finds, on the basis of such reports or other information, that the local government tank system owner or operator, and/or guarantor, no longer meets the local government bond rating test requirements of this paragraph, the local government tank system owner or operator must obtain alternative coverage within 30 days after notification of such a finding.

(vii) If a local government tank system owner or operator using the bond rating test to provide financial assurance finds that it no longer meets the bond rating test requirements, the local government tank system owner or operator must obtain alternative coverage within 150 days after the change in status.

(viii) If the local government tank system owner or operator fails to obtain alternate assurance within 150 days after finding that it no longer meets the requirements of the bond rating test or within 30 days after notification by the Commissioner of the Department that it no longer meets the requirements of the bond rating test, the tank system owner or operator must notify the Commissioner of such failure within ten days.

(9) *Local government financial test.*

(i) A local government tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by passing the financial test specified in this section.

To be eligible to use the financial test, the local government tank system owner or operator must have the ability and authority to assess and levy taxes or to freely establish fees and charges. To pass the local government financial test, the tank system owner or operator must meet the criteria of clauses (ii)(b) and (c) of this paragraph based on year-end financial statements for the latest completed fiscal year.

(ii) (a) The local government tank system owner or operator must have the following information available, as shown in the year-end financial statements for the latest completed fiscal year:

(1) *Total revenues.* Consists of the sum of general fund operating and nonoperating revenues including net local taxes, licenses and permits, fines and forfeitures, revenues from use of money and property, charges for services, investment earnings, sales (property, publications, etc.), intergovernmental revenues (restricted and unrestricted), and total revenues from all other governmental funds including enterprise, debt service, capital projects, and special revenues, but excluding revenues to funds held in a trust or agency capacity. For purposes of this test, the calculation of total revenues must exclude all transfers between funds under the direct control of the local government using the financial test (interfund transfers), liquidation of investments, and issuance of debt.

(2) *Total expenditures.* Consists of the sum of general fund operating and nonoperating expenditures including public safety, public utilities, transportation, public works, environmental protection, cultural and recreational, community development, revenue sharing, employee benefits and compensation, office management, planning and zoning, capital projects, interest payments on debt, payments for retirement of debt principal, and total expenditures from all other governmental funds including enterprise, debt service, capital projects, and special revenues. For purposes of this test, the calculation of total expenditures must exclude all transfers between funds under the direct control of the local government using the financial test (interfund transfers).

(3) *Local revenues.* Consists of total revenues (as defined in subclause (1) of this clause) minus the sum of all transfers from other governmental entities, including all monies received from federal, state, or local government sources.

(4) *Debt service.* Consists of the sum of all interest and principal payments on all long-term credit obligations and all interest-bearing short-term credit obligations. Includes interest and principal payments on general obligation bonds, revenue bonds, notes, mortgages, judgments, and interest-bearing warrants. Excludes payments on non-interest-bearing short-term obligations, interfund obligations, amounts owed in a trust or agency capacity, and advances and contingent loans from other governments.

(5) *Total funds.* Consists of the sum of cash and investment securities from all funds, including general, enterprise, debt service, capital projects, and special revenue funds, but excluding employee retirement funds, at the end of the local government's financial reporting year. Includes federal securities, federal agency securities, state and local government securities, and other securities such as bonds, notes and mortgages. For purposes

of this test, the calculation of total funds must exclude agency funds, private trust funds, accounts receivable, value of real property, and other non-security assets.

(6) *Population*. Consists of the number of people in the area served by the local government.

(b) The local government's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion or a disclaimer of opinion. The local government cannot have outstanding issues of general obligation or revenue bonds that are rated as less than investment grade.

(c) The local government tank system owner or operator must have a letter signed by the chief financial officer worded as specified in subparagraph (iii) of this paragraph.

(iii) To demonstrate that it meets the financial test under subparagraph (ii) of this paragraph, the chief financial officer of the local government tank system owner or operator, must sign, within 120 days after the close of each financial reporting year, as defined by the twelve-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Letter From Chief Financial Officer

I am the chief financial officer of [insert: name and address of the tank system owner or operator]. This letter is in support of the use of the local government financial test to demonstrate financial responsibility for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage"] caused by [insert: "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating [an] underground storage tank[s].

Underground storage tanks at the following facilities are assured by this financial test [List for each facility: the name and address of the facility where tanks assured by this financial test are located. If separate mechanisms or combinations of mechanisms are being used to assure any of the tanks at this facility, list each tank assured by this financial test by the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part.]

This owner or operator has not received an adverse opinion, or a disclaimer of opinion from an independent auditor on its financial statements for the latest completed fiscal year. Any outstanding issues of general obligation or revenue bonds, if rated, have a Moody's rating of Aaa, Aa, A, or Baa or a Standard and Poor's rating of AAA, AA, A, or BBB; if rated by both firms, the bonds have a Moody's rating of Aaa, Aa, A, or Baa and a Standard and Poor's rating of AAA, AA, A, or BBB.

Worksheet for Municipal Financial Test

Part I: Basic Information

1. Total Revenues

a. Revenues (dollars) Value of revenues excludes liquidation of investments and issuance of debt. Value includes all general fund operating and non-operating revenues, as well as all revenues from all other governmental funds including enterprise, debt service, capital projects, and special revenues, but excluding revenues to funds held in a trust or agency capacity.

b. Subtract interfund transfers (dollars)

c. Total Revenues (dollars)

2. Total Expenditures

a. Expenditures (dollars) Value consists of the sum of general fund operating and non-operating expenditures including interest payments on debt, payments for retirement of debt principal, and total expenditures from all other governmental funds including enterprise, debt service, capital projects, and special revenues.

b. Subtract interfund transfers (dollars)

c. Total Expenditures (dollars)

3. Local Revenues

a. Total Revenues (from 1c) (dollars)

b. Subtract total intergovernmental transfers (dollars)

c. Local Revenues (dollars)

4. Debt Service

a. Interest and fiscal charges (dollars)

b. Add debt retirement (dollars)

c. Total Debt Service (dollars)

5. Total Funds (Dollars) (Sum of amounts held as cash and investment securities from all funds, excluding amounts held for employee retirement funds, agency funds, and trust funds)

6. Population (Persons)

Part II: Application of Test

7. Total Revenues to Population

a. Total Revenues (from 1c)

b. Population (from 6)

c. Divide 7a by 7b

d. Subtract 417

e. Divide by 5,212

f. Multiply by 4.095

8. Total Expenses to Population

a. Total Expenses (from 2c)

b. Population (from 6)

c. Divide 8a by 8b

d. Subtract 524

e. Divide by 5,401

f. Multiply by 4.095

9. Local Revenues to Total Revenues

a. Local Revenues (from 3c)

b. Total Revenues (from 1c)

c. Divide 9a by 9b

d. Subtract .695

e. Divide by .205

f. Multiply by 2.840

10. Debt Service to Population

a. Debt Service (from 4c)

b. Population (from 6)

c. Divide 10a by 10b

d. Subtract 51

e. Divide by 1,038

f. Multiply by -1.866

11. Debt Service to Total Revenues

a. Debt Service (from 4c)

b. Total Revenues (from 1c)

c. Divide 11a by 11b

d. Subtract .068

e. Divide by .259

f. Multiply by -3.533

12. Total Revenues to Total Expenses

a. Total Revenues (from 1c)

b. Total Expenses (from 2c)

c. Divide 12a by 12b

d. Subtract .910

e. Divide by .899

f. Multiply by 3.458

13. Funds Balance to Total Revenues

a. Total Funds (from 5)

b. Total Revenues (from 1c)

c. Divide 13a by 13b

d. Subtract .891

e. Divide by 9.156

f. Multiply by 3.270

14. Funds Balance to Total Expenses

a. Total Funds (from 5)

b. Total Expenses (from 2c)

c. Divide 14a by 14b

d. Subtract .866

e. Divide by 6.409

f. Multiply by 3.270

15. Total Funds to Population

a. Total Funds (from 5)

b. Population (from 6)

c. Divide 15a by 15b

d. Subtract 270

e. Divide by 4,548

f. Multiply by 1.866

16. Add $7f + 8f + 9f + 10f + 11f + 12f + 13f + 14f + 15f + 4.937$

I hereby certify that the financial index shown on line 16 of the worksheet is greater than zero and that the wording of this letter is identical to the wording specified in 6 NYCRR 613-8.4(d)(9)(iii) as such regulations were constituted on the date shown immediately below.

[Date]

[Signature]

[Name]

(iv) If a local government tank system owner or operator using the test to provide financial assurance finds that it no longer meets the requirements of the financial test based on the year-end financial statements, the tank system owner or operator must obtain alternative coverage within 150 days after the end of the year for which financial statements have been prepared.

(v) The Commissioner of the Department may require reports of financial condition at any time from the local government tank system owner or operator. If the Commissioner finds, on the basis of such reports or other information, that the local government tank system owner or operator no longer meets the financial test requirements of subparagraphs (ii) and (iii) of this paragraph, the tank system owner or operator must obtain alternate coverage within 30 days after notification of such a finding.

(vi) If the local government tank system owner or operator fails to obtain alternate assurance within 150 days after finding that it no longer meets the requirements of the financial test based on the yearend financial statements or within 30 days after notification by the Commissioner of the Department that it no longer meets the requirements of the financial test, the tank system owner or operator must notify the Commissioner of such failure within ten days.

(10) *Local government guarantee.*

(i) A local government tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by obtaining a guarantee that meets the requirements of this section. The guarantor must be either the state in which the local government tank system owner or operator is located or a local government having a “substantial governmental relationship” with the tank system owner and operator and issuing the guarantee as an act incident to that relationship. A local government acting as the guarantor must:

(a) demonstrate that it meets the bond rating test requirement of paragraph (8) of this subdivision, and deliver a copy of the chief financial officer’s letter as contained in subparagraphs (8)(iv) and (v) of this subdivision, to the local government tank system owner or operator; or

(b) demonstrate that it meets the worksheet test requirements of paragraph (9) of this subdivision, and deliver a copy of the chief financial officer’s letter as contained in subparagraph (9)(iii) of this subdivision, to the local government tank system owner or operator; or

(c) demonstrate that it meets the local government fund requirements of clause (11)(i)(a), (b), or (c) of this subdivision, and deliver a copy of the chief financial officer’s letter as contained in subparagraph (11)(ii) of this subdivision, to the local government tank system owner or operator.

(ii) If the local government guarantor is unable to demonstrate financial assurance under paragraphs (8) or (9), or clause (11)(i)(a), (b), or (c) of this subdivision at the end of the financial reporting year, the guarantor must send by certified mail notice to the tank system owner or operator before cancellation or non-renewal of the guarantee. The guarantee will terminate no less than 120 days after the date the tank system owner or operator receives the notification, as evidenced by the return receipt. The tank system owner or operator must obtain alternative coverage as specified in paragraph 8.7(c)(5) of this Subpart.

(iii) The guarantee agreement must be worded as specified in subparagraph (iv) or (v) of this paragraph, depending on which of the following alternative guarantee arrangements is selected:

(a) If, in the default or incapacity of the tank system owner or operator, the guarantor guarantees to fund a standby trust as directed by the Commissioner of the Department, the guarantee must be worded as specified in subparagraph (iv) of this paragraph.

(b) If, in the default or incapacity of the tank system owner or operator, the guarantor guarantees to make payments as directed by the Commissioner of the Department for taking corrective action or compensating third parties for bodily injury and property damage, the guarantee must be worded as specified in subparagraph (v) of this paragraph.

(iv) If the guarantor is a state, the local government guarantee with standby trust must be worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Local Government Guarantee With Standby Trust Made by a State

Guarantee made this [date] by [name of state], herein referred to as guarantor, to [the state implementing agency] and to any and all third parties, and obliges, on behalf of [local government tank system owner or operator].

Recitals

(1) Guarantor is a state.

(2) [Local government tank system owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part, and the name and address of the facility.] This guarantee satisfies 6 NYCRR 613-8 requirements for assuring funding for [insert: "taking corrective action" and/ or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"; if coverage is

different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the above-identified underground storage tank(s) in the amount of [insert dollar amount] per occurrence and [insert dollar amount] annual aggregate.

(3) Guarantor guarantees to [implementing agency] and to any and all third parties that: In the event that [local government tank system owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and the [Commissioner of the Department] has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon instructions from the [Commissioner] shall fund a standby trust fund in accordance with the provisions of 6 NYCRR 613-8.7(a), in an amount not to exceed the coverage limits specified above.

In the event that the [Commissioner] determines that [local government tank system owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with 6 NYCRR 613-7, the guarantor upon written instructions from the [Commissioner] shall fund a standby trust fund in accordance with the provisions of 6 NYCRR 613-8.7(a), in an amount not to exceed the coverage limits specified above.

If [tank system owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by [“sudden” and/or “non-sudden”] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the [Commissioner], shall fund a standby trust in accordance with the provisions of 6 NYCRR 613-8.7(a) to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

(4) Guarantor agrees to notify [tank system owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within ten days after commencement of the proceeding.

(5) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [tank system owner or operator] pursuant to 6 NYCRR 613.

(6) Guarantor agrees to remain bound under this guarantee for so long as [local government tank system owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR 613-8 for the above identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [tank system owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [tank system owner or operator], as evidenced by the return receipt.

(7) The guarantor’s obligation does not apply to any of the following:

(a) any obligation of [local government tank system owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) bodily injury to an employee of [insert: local government tank system owner or operator] arising from, and in the course of, employment by [insert: local government tank system owner or operator];

(c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert: local government tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or

(e) bodily damage or property damage for which [insert tank system owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.

(8) Guarantor expressly waives notice of acceptance of this guarantee by [the implementing agency], by any or all third parties, or by [local government tank system owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR 613-8.4(d)(10)(iv) as such regulations were constituted on the effective date shown immediately below.

Effective date:

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

If the guarantor is a local government, the local government guarantee with standby trust must be worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Local Government Guarantee With Standby Trust Made by a Local Government

Guarantee made this [date] by [name of guaranteeing entity], a local government organized under the laws of [name of state], herein referred to as guarantor, to [the state implementing agency] and to any and all third parties, and obliges, on behalf of [local government tank system owner or operator].

Recitals

(1) Guarantor meets or exceeds [select one: the local government bond rating test requirements of 6 NYCRR 613-8.4(d)(8), the local government financial test requirements of 6 NYCRR 613-8.4(d)(9), or the local government fund under 6 NYCRR 613-8.4(d)(11)(i)(a), (b), or (c)].

(2) [Local government tank system owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part, and the name and address of the facility.] This guarantee satisfies 6 NYCRR 613-8 requirements for assuring funding for [insert: “taking corrective action” and/or “compensating third parties for bodily injury and property damage caused by” either “sudden accidental Releases” or “non-sudden accidental releases” or “accidental Releases”; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the above-identified underground storage tank(s) in the amount of [insert dollar amount] per occurrence and [insert: dollar amount] annual aggregate.

(3) Incident to our substantial governmental relationship with [local government tank system owner or operator], guarantor guarantees to [implementing agency] and to any and all third parties that:

In the event that [local government tank system owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and the [Commissioner of the Department] has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon instructions from the [Commissioner] shall fund a standby trust fund in accordance with the provisions of 6 NYCRR 613-8.7(a), in an amount not to exceed the coverage limits specified above.

In the event that the [Commissioner] determines that [local government tank system owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with 6 NYCRR 613-7, the guarantor upon written instructions from the [Commissioner] shall fund a standby trust fund in accordance with the provisions of 6 NYCRR 613-8.7(a), in an amount not to exceed the coverage limits specified above.

If [tank system owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by [“sudden” and/or “non-sudden”] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to

arise from such injury or damage, the guarantor, upon written instructions from the [Commissioner], shall fund a standby trust in accordance with the provisions of 6 NYCRR 613-8.7(a) to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

(4) Guarantor agrees that, if at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet or exceed the requirements of the financial responsibility mechanism specified in paragraph (1), guarantor shall send within 120 days after such failure, by certified mail, notice to [local government tank system owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [tank system owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within ten days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [tank system owner or operator] pursuant to 6 NYCRR 613.

(7) Guarantor agrees to remain bound under this guarantee for so long as [local government tank system owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR 613-8 for the above identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [tank system owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [tank system owner or operator], as evidenced by the return receipt.

(8) The guarantor's obligation does not apply to any of the following:

(a) any obligation of [local government tank system owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) bodily injury to an employee of [insert: local government tank system owner or operator] arising from, and in the course of, employment by [insert: local government tank system owner or operator];

(c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert: local government tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or

(e) bodily damage or property damage for which [insert: tank system owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.

(9) Guarantor expressly waives notice of acceptance of this guarantee by [the implementing agency], by any or all third parties, or by [local government tank system owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR 613-8.4(d)(10)(iv) as such regulations were constituted on the effective date shown immediately below.

Effective date:

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

(v) If the guarantor is a state, the local government guarantee without standby trust must be worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Local Government Guarantee Without Standby Trust Made by a State

Guarantee made this [date] by [name of state], herein referred to as guarantor, to [the state implementing agency] and to any and all third parties, and obliges, on behalf of [local government tank system owner or operator].

Recitals

(1) Guarantor is a state.

(2) [Local government tank system owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part, and the name and address of the facility.] This guarantee satisfies 6 NYCRR 613-8 requirements for assuring funding for [insert: "taking corrective action" and/ or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases"; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or

location] arising from operating the above-identified underground storage tank(s) in the amount of [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate.

(3) Guarantor guarantees to [implementing agency] and to any and all third parties and obliges that:

In the event that [local government tank system owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and the [Commissioner of the Department] has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon written instructions from the [Commissioner] shall make funds available to pay for corrective actions and compensate third parties for bodily injury and property damage in an amount not to exceed the coverage limits specified above.

In the event that the [Commissioner] determines that [local government tank system owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with 6 NYCRR 613-7, the guarantor upon written instructions from the [Commissioner] shall make funds available to pay for corrective actions in an amount not to exceed the coverage limits specified above.

If [tank system owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by ["sudden" and/or "non-sudden"] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the [Commissioner], shall make funds available to compensate third parties for bodily injury and property damage in an amount not to exceed the coverage limits specified above.

(4) Guarantor agrees to notify [tank system owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within ten days after commencement of the proceeding.

(5) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [tank system owner or operator] pursuant to 6 NYCRR 613.

(6) Guarantor agrees to remain bound under this guarantee for so long as [local government tank system owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR 613-8 for the above identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [tank system owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [tank system owner or operator], as evidenced by the return receipt. If notified of a probable release, the guarantor agrees to remain bound to the terms of this guarantee for all charges arising from the release, up to the coverage limits specified above, notwithstanding the cancellation of the guarantee with respect to future releases.

(7) The guarantor's obligation does not apply to any of the following:

(a) any obligation of [local government tank system owner or operator] under a workers' compensation disability benefits, or unemployment compensation law or other similar law;

(b) bodily injury to an employee of [insert local government tank system owner or operator] arising from, and in the course of, employment by [insert: local government tank system owner or operator];

(c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert: local government tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or

(e) bodily damage or property damage for which [insert: owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.

(8) Guarantor expressly waives notice of acceptance of this guarantee by [the implementing agency], by any or all third parties, or by [local government tank system owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR 613-8.4(d)(10)(v) as such regulations were constituted on the effective date shown immediately below.

Effective date:

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

If the guarantor is a local government, the local government guarantee without standby trust must be worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Local Government Guarantee Without Standby Trust Made by a Local Government

Guarantee made this [date] by [name of guaranteeing entity], a local government organized under the laws of [name of state], herein referred to as guarantor, to [the state implementing agency] and to any and all third parties, and obliges, on behalf of [local government tank system owner or operator].

Recitals

(1) Guarantor meets or exceeds [select one: the local government bond rating test requirements of 6 NYCRR 613-8.4(d)(8), the local government financial test requirements of 6 NYCRR 613-8.4(d)(9), the local government fund under 6 NYCRR 613-8.4(d)(11)(i)(a), (b), or (c)].

(2) [Local government tank system owner or operator] owns or operates the following underground storage tank(s) covered by this guarantee: [List the number of tanks at each facility and the name(s) and address(es) of the facility(ies) where the tanks are located. If more than one instrument is used to assure different tanks at any one facility, for each tank covered by this instrument, list the tank identification number provided in the notification submitted pursuant to subdivision 1.9(c) of this Part, and the name and address of the facility.] This guarantee satisfies 6 NYCRR 613-8 requirements for assuring funding for [insert: “taking corrective action” and/ or “compensating third parties for bodily injury and property damage caused by” either “sudden accidental releases” or “non-sudden accidental releases” or “accidental releases”; if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the above-identified underground storage tank(s) in the amount of [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate.

(3) Incident to our substantial governmental relationship with [local government tank system owner or operator], guarantor guarantees to [implementing agency] and to any and all third parties and obliges that:

In the event that [local government tank system owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and the [Commissioner of the Department] has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon written instructions from the [Commissioner] shall make funds available to pay for corrective actions and compensate third parties for bodily injury and property damage in an amount not to exceed the coverage limits specified above.

In the event that the [Commissioner] determines that [local government tank system owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with 6 NYCRR 613-7, the guarantor upon written instructions from the [Commissioner] shall make funds available to pay for corrective actions in an amount not to exceed the coverage limits specified above.

If [tank system owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by [“sudden” and/or “non-sudden”] accidental releases arising from the operation of the above-identified

tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the [Commissioner], shall make funds available to compensate third parties for bodily injury and property damage in an amount not to exceed the coverage limits specified above.

(4) Guarantor agrees that if at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet or exceed the requirements of the financial responsibility mechanism specified in paragraph (1), guarantor shall send within 120 days after such failure, by certified mail, notice to [local government tank system owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [tank system owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within ten days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [tank system owner or operator] pursuant to 6 NYCRR 613.

(7) Guarantor agrees to remain bound under this guarantee for so long as [local government tank system owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR 613-8 for the above identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [tank system owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [tank system owner or operator], as evidenced by the return receipt. If notified of a probable release, the guarantor agrees to remain bound to the terms of this guarantee for all charges arising from the release, up to the coverage limits specified above, notwithstanding the cancellation of the guarantee with respect to future releases.

(8) The guarantor's obligation does not apply to any of the following:

(a) any obligation of [local government tank system owner or operator] under a workers' compensation disability benefits, or unemployment compensation law or other similar law;

(b) bodily injury to an employee of [insert: local government tank system owner or operator] arising from, and in the course of, employment by [insert: local government tank system owner or operator];

(c) bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by [insert: local government tank system owner or operator] that is not the direct result of a release from a petroleum underground storage tank; or

(e) bodily damage or property damage for which [insert: owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of 6 NYCRR 613-8.3.

(9) Guarantor expressly waives notice of acceptance of this guarantee by [the implementing agency], by any or all third parties, or by [local government tank system owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR 613-8.4(d)(10)(v) as such regulations were constituted on the effective date shown immediately below.

Effective date:

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

(11) Local government fund.

(i) A local government tank system owner or operator may satisfy the requirements of section 8.3 of this Subpart by establishing a dedicated fund account that meets the requirements of this section. Except as specified in clause (b) of this subparagraph, a dedicated fund may not be commingled with other funds or otherwise used in normal operations. A dedicated fund will be considered eligible if it meets one of the following requirements:

(a) the fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order to pay for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks and is funded for the full amount of coverage required under section 8.3 of this Subpart, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining coverage; or

(b) the fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order as a contingency fund for general emergencies, including taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum

underground storage tanks, and is funded for five times the full amount of coverage required under section 8.3 of this Subpart, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining coverage (if the fund is funded for less than five times the amount of coverage required under section 8.3 of this Subpart, the amount of financial responsibility demonstrated by the fund may not exceed one-fifth the amount in the fund); or

(c) the fund is dedicated by state constitutional provision, or local government statute, charter, ordinance or order to pay for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks, and the local government tank system owner or operator has either available bonding authority in accordance with subclause (1), or a letter signed by the appropriate state attorney general in accordance with subclause (2).

(1) Available bonding authority is approved through voter referendum (if such approval is necessary prior to the issuance of bonds) for an amount equal to the difference between the required amount of coverage and the amount held in the dedicated fund. This bonding authority must be available for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks.

(2) A letter signed by the appropriate state attorney general states that the use of the bonding authority will not increase the local government's debt beyond the legal debt ceilings established by the relevant state laws. The letter must also state that prior voter approval is not necessary before use of the bonding authority.

(3) A payment is made to the fund once every year for seven years until the fund is fully-funded. This seven-year period is hereafter referred to as the "pay-in-period." The amount of each payment must be determined by this formula:

$$(TF - CF) / Y$$

where TF is the total required financial assurance for the tank system owner or operator, CF is the current amount in the fund, and Y is the number of years remaining in the pay-in-period.

(ii) To demonstrate that it meets the requirements of the local government fund, the chief financial officer of the local government tank system owner or operator and/or guarantor must sign a letter worded exactly as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer

I am the chief financial officer of [insert: name and address of local government tank system owner or operator, or guarantor]. This letter is in support of the use of the local government fund mechanism to demonstrate financial responsibility for [insert: "taking corrective

action” and/or “compensating third parties for bodily injury and property damage”) caused by [insert: “sudden accidental releases” or “non-sudden accidental releases” or “accidental releases”) in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar amount] annual aggregate arising from operating (an) underground storage tank(s).

Underground storage tanks at the following facilities are assured by this local government fund mechanism: [List for each facility: The name and address of the facility where tanks are assured by the local government fund].

[Insert: “The local government fund is funded for the full amount of coverage required under 6 NYCRR 613-8.3, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining coverage.” or “The local government fund is funded for five times the full amount of coverage required under 6 NYCRR 613-8.3, or funded for part of the required amount of coverage and used in combination with other mechanisms(s) that provide the remaining coverage,” or “A payment is made to the fund once every year for seven years until the fund is fully-funded and [name of local government tank system owner or operator] has available bonding authority, approved through voter referendum, of an amount equal to the difference between the required amount of coverage and the amount held in the dedicated fund” or “A payment is made to the fund once every year for seven years until the fund is fully-funded and I have attached a letter signed by the State Attorney General stating that (1) the use of the bonding authority will not increase the local government’s debt beyond the legal debt ceilings established by the relevant state laws and (2) that prior voter approval is not necessary before use of the bonding authority”].

The details of the local government fund are as follows:

Amount in Fund (market value of fund at close of last fiscal year):

[If fund balance is incrementally funded as specified in 6 NYCRR 613-8.4(d)(11)(i)(c), insert:

Amount added to fund in the most recently completed fiscal year:

Number of years remaining in the pay-in-period:]

A copy of the state constitutional provision, or local government statute, charter, ordinance or order dedicating the fund is attached.

I hereby certify that the wording of this letter is identical to the wording specified in 6 NYCRR 613-8.4(d)(11)(i)(b) as such regulations were constituted on the date shown immediately below.

[Date]

[Signature]

[Name]

(e) *Substitution of financial assurance mechanisms by owner or operator.*

(1) A tank system owner or operator may substitute any alternate financial assurance mechanisms as specified in this Subpart, provided that at all times they maintain an effective financial assurance mechanism or combination of mechanisms that satisfies the requirements of section 8.3 of this Subpart.

(2) After obtaining alternate financial assurance as specified in this Subpart, a tank system owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance.

(f) *Cancellation or nonrenewal by a provider of financial assurance.*

(1) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the tank system owner or operator.

(i) Termination of a local government guarantee, a guarantee, a surety bond, or a letter of credit may not occur until 120 days after the date on which the tank system owner or operator receives the notice of termination, as evidenced by the return receipt.

(ii) Termination of insurance or risk retention coverage, except for nonpayment or misrepresentation by the insured, or state-funded assurance may not occur until 60 days after the date on which the tank system owner or operator receives the notice of termination, as evidenced by the return receipt. Termination for non-payment of premium or misrepresentation by the insured may not occur until a minimum of ten days after the date on which the tank system owner or operator receives the notice of termination, as evidenced by the return receipt.

(2) If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in subdivision 8.7(c) of this Subpart, the tank system owner or operator must obtain alternate coverage as specified in this section within 60 days after receipt of the notice of termination. If the tank system owner or operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, the tank system owner or operator must notify the Commissioner of the Department of such failure and submit:

(i) the name and address of the provider of financial assurance;

(ii) the effective date of termination; and

(iii) the evidence of the financial assistance mechanism subject to the termination maintained in accordance with 8.6(b).

613-8.5 Reporting by tank system owner or operator.

(a) A tank system owner or operator must submit the appropriate forms listed under subdivision 8.6(b) of this Subpart documenting current evidence of financial responsibility to the Commissioner of the Department:

(1) within 30 days after the tank system owner or operator identifies a release from an underground storage tank required to be reported under 2.4(d), 5.4(a), or 6.2;

(2) if the tank system owner or operator fails to obtain alternate coverage as required by this Subpart, within 30 days after the tank system owner or operator receives notice of:

(i) commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor;

(ii) suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism;

(iii) failure of a guarantor to meet the requirements of the financial test;

(iv) other incapacity of a provider of financial assurance; or

(3) as required by subparagraph 8.4(d)(1)(vi) and paragraph 8.4(f)(2) of this Subpart.

(b) A tank system owner or operator must certify compliance with the financial responsibility requirements of this part as specified in the new tank notification form when notifying the appropriate state or local agency of the installation of a new underground storage tank under subdivision 1.9(c) of this Part.

(c) The Commissioner of the Department may require a tank system owner or operator to submit evidence of financial assurance as described in subdivision 8.6(b) of this Subpart or other information relevant to compliance with this Subpart at any time.

613-8.6 Recordkeeping.

(a) Tank system owners or operators must maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this Subpart for an underground storage tank until released from the requirements of this Subpart under subdivision 8.7(b) of this Subpart. A tank system owner or operator must maintain such evidence at the underground storage tank site or the owner's or operator's place of work. Records maintained off-site must be made available upon request of the implementing agency.

(b) A tank system owner or operator must maintain the following types of evidence of financial responsibility:

(1) For assurance mechanisms specified in paragraphs 8.4(d)(1) through (6) or (8) through (11) of this Subpart, a copy of the instrument worded as specified must be maintained.

(2) For financial tests or guarantees, or local government financial tests or local government guarantees supported by the local government financial test under paragraph 8.4(d)(1), (2), (9), or (10) of this Subpart, respectively, a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial reporting year, must be maintained. Such evidence must be on file no later than 120 days after the close of the financial reporting year.

(3) For guarantees, surety bonds, or letters of credit under paragraph 8.4(d)(2), (4), or (5) of this Subpart, respectively, a copy of the signed standby trust fund agreement and copies of any amendments to the agreement must be maintained.

(4) For local government guarantees under subparagraph 8.4(d)(10)(iv) of this Subpart, a copy of the signed standby trust fund agreement and copies of any amendments to the agreement must be maintained.

(5) For local government bond rating tests under paragraph 8.4(d)(8) of this Subpart, a copy of the local government tank system owner or operator's bond rating published within the last twelve months by Moody's or Standard & Poor's must be maintained.

(6) For the local government guarantees under paragraph 8.4(d)(10) of this Subpart, where the guarantor's demonstration of financial responsibility relies on the bond rating test under 8.4(d)(8) must maintain a copy of the guarantor's bond rating published within the last twelve months by Moody's or Standard & Poor's.

(7) For insurance policies or risk retention group coverages under paragraph 8.4(d)(3) of this Subpart, a copy of the signed insurance policy or risk retention group coverage policy must be maintained, along with the endorsement or certificate of insurance and any amendments to the agreements.

(8) For local government funds under paragraph 8.4(d)(11) of this Subpart, the following documents must be maintained:

(i) a copy of the state constitutional provision or local government statute, charter, ordinance, or order dedicating the fund; and

(ii) year-end financial statements for the most recent completed financial reporting year showing the amount in the fund. If the fund is established under clause 8.4(d)(11)(i)(c) of this Subpart using incremental funding backed by bonding authority, the financial statements must:

(a) show the previous year's balance, the amount of funding during the year, and the closing balance in the fund; and

(b) include documentation of the required bonding authority (*i.e.*, the results of a voter referendum under subclause 8.4(d)(11)(i)(c)(1) of this Subpart, or attestation by the State Attorney General as specified under subclause 8.4(d)(11)(i)(c)(2) of this Subpart).

(9) For local government guarantees supported by a local government fund under paragraphs 8.4(d)(10) and (11) of this Subpart, respectively, a copy of the guarantor's year-end financial statements for the most recent completed financial reporting year showing the amount of the fund must be maintained.

(10) (i) For assurance mechanisms specified in paragraphs 8.4(d)(1) through (11) of this Subpart, an updated copy of a certification of financial responsibility worded as follows must be maintained, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Certification of Financial Responsibility

[Tank system owner or operator] hereby certifies that it is in compliance with the requirements of 6 NYCRR Part 613-8.

The financial assurance mechanism(s) used to demonstrate financial responsibility under 6 NYCRR Part 613-8 is (are) as follows:

[For each mechanism, list the type of mechanism, name of issuer, mechanism number (if applicable), amount of coverage, effective period of coverage and whether the mechanism covers "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases."]

[Signature of tank system owner or operator]

[Name of tank system owner or operator]

[Title]

[Date]

[Signature of witness or notary]

[Name of witness or notary]

[Date]

(ii) The tank system owner or operator must update this certification whenever the financial assurance mechanism(s) used to demonstrate financial responsibility change(s).

613-8.7 Use and maintenance of financial assurance mechanisms.

(a) *Drawing on financial assurance mechanisms.*

(1) Except as specified in paragraph (4) of this subdivision, the Commissioner of the Department will require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the Commissioner, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if:

(i) (a) the tank system owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or, as applicable, other financial assurance mechanism; and

(b) the Commissioner determines or suspects that a leak from an underground storage tank covered by the mechanism has occurred and so notifies the tank system owner or operator, or the tank system owner or operator has notified the Commissioner pursuant to subdivision 2.4(e), section 5.4, or Subpart 7 of this Part, of a leak from an underground storage tank covered by the mechanism; or

(ii) the conditions of subparagraph (2)(i), or clause (2)(ii)(a) or (b) of this subdivision are satisfied.

(2) The Commissioner of the Department may draw on a standby trust fund when:

(i) the Commissioner makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the tank system owner or operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under Subpart 7 of this Part; or

(ii) the Commissioner has received one of the following:

(a) Certification from the tank system owner or operator and the third-party liability claimant(s) and from attorneys representing the tank system owner or operator and the third-party liability claimant(s) that a third-party liability claim should be paid. The certification must be worded as follows, except that the instructions in brackets must be replaced with the relevant information and the brackets deleted:

Certification of Valid Claim

The undersigned, as principals and as legal representatives of [insert: owner or operator] and [insert: name and address of third-party claimant], hereby certify that the claim of bodily injury [and/or] property damage caused by an accidental release arising from operating [owner's or operator's] underground storage tank should be paid in the amount of \$[_____].

[Signatures]

[Tank system owner or operator]

[Attorney for tank system owner or operator]

(Notary)

Date

[Signatures]

Claimant(s)

Attorney(s) for Claimant(s)

(Notary)

Date

(b) A valid final court order establishing a judgment against the tank system owner or operator for bodily injury or property damage caused by an accidental release from an underground storage tank covered by financial assurance under this Subpart and the Commissioner determines that the tank system owner or operator has not satisfied the judgment.

(3) If the Commissioner of the Department determines that the amount of corrective action costs and third-party liability claims eligible for payment under paragraph (b) of this section may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the first priority for payment will be corrective action costs necessary to protect human health and the environment. The Commissioner will pay third-party liability claims in the order in which the Commissioner receives certifications under clause (2)(ii)(a) of this subdivision, and valid court orders under clause (2)(ii)(b) of this subdivision.

(4) A governmental entity acting as guarantor under subparagraph 8.4(d)(10)(v) of this Subpart, and the local government guarantee without standby trust must make payments as directed by the Commissioner under the circumstances described in paragraphs (1), (2), and (3) of this subdivision.

(b) *Release from the requirements.* A tank system owner or operator is no longer required to maintain financial responsibility under this Subpart for an underground storage tank after the tank has been permanently closed or, if corrective action is required, after corrective action has been completed and the tank has been permanently closed, in accordance with subdivision 2.6(b) or section 5.6 of this Part.

(c) *Bankruptcy or other incapacity of tank system owner or operator, or provider of financial assurance.*

(1) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a tank system owner or operator as debtor, the tank system owner or operator must notify the Commissioner of the Department by certified mail

of such commencement and submit the appropriate forms listed under subdivision 8.6(b) of this Subpart documenting current financial responsibility.

(2) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor must notify the tank system owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in paragraph 8.4(d)(2) of this Subpart.

(3) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a local government tank system owner or operator as debtor, the local government tank system owner or operator must notify the Commissioner of the Department by certified mail of such commencement and submit the appropriate forms listed under subdivision 8.6(b) of this Subpart documenting current financial responsibility.

(4) Within ten days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing a local government financial assurance as debtor, such guarantor must notify the local government tank system owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in 8.4(d)(10).

(5) A tank system owner or operator who obtains financial assurance by a mechanism other than the financial test of self-insurance will be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, letter of credit, or state-required mechanism. The tank system owner or operator must obtain alternate financial assurance as specified in this Subpart within 30 days after receiving notice of such an event. If the tank system owner or operator does not obtain alternate coverage within 30 days after such notification, they must notify the Commissioner of the Department.

(6) Within 30 days after receipt of notification that a state fund or other state assurance has become incapable of paying for assured corrective action or third-party compensation costs, the tank system owner or operator must obtain alternate financial assurance.

(d) Replenishment of guarantees, letters of credit, or surety bonds.

(1) If at any time after a standby trust is funded upon the instruction of the Commissioner of the Department with funds drawn from a guarantee, local government guarantee with standby trust, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the tank system owner or operator must, by the anniversary date of the financial mechanism from which the funds were drawn:

(i) replenish the value of financial assurance to equal the full amount of coverage required; or

(ii) acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.

(2) For purposes of this subdivision, the full amount of coverage required is the amount of coverage to be provided by section 8.3 of this Subpart. If a combination of mechanisms was used to provide the assurance funds which were drawn upon, replenishment must occur by the earliest anniversary date among the mechanisms.