

# New York State Department of Environmental Conservation

## Division of Environmental Remediation

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Joe Martens  
Commissioner

October 1, 2013

Mr. Mark Blanke, P.E.  
New York Department of State  
Codes Division  
99 Washington Ave  
Albany NY 12231

Dear Mr. Blanke:

This letter is to request a review of the enclosed draft Petroleum Bulk Storage (PBS) regulation by the Code Council to confirm that there are no conflicts with the Uniform Fire Prevention and Building Code. When the review is complete, we request a letter to New York State Department of Environmental Conservation (DEC) confirming that there are no conflicts. We request this review in accordance with the requirements of Environmental Conservation Law (ECL) Article 17, Title 10 [17-1015(1)].

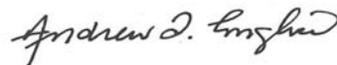
DEC is undertaking this rulemaking to address federal and State statutory changes. The federal statute changed in August 2005 with the passage of the Energy Policy Act and conforming changes were made to State statute in July 2008. In addition, DEC is consolidating all existing state and federal requirements for underground storage tanks into one State regulation and increasing consistency with the EPA regulations by adopting the federal regulation structure and the definitions from the EPA regulation to the maximum extent possible. Lastly, DEC is providing some clarifications to certain provisions of the existing PBS regulation.

Also enclosed is a handout that was intended for the September 11 Council meeting (canceled) that provides additional information. DEC staff is available to meet with representatives from the Council as this review is being conducted to help answer questions or address any issues that may be raised.

The informal comment period for the draft regulation has recently concluded and we are in the process of making some minor modifications. Our current goal is to officially propose the regulation by the end of November. It would be beneficial to DEC to have the review of the draft regulation to ensure there are no conflicts before we begin routing the regulation for approval at the end of October.

We thank you and the Council for your help in this matter.

Sincerely,



Andrew J. English, P.E.  
Director, Bureau of Technical Support

Enclosures

ec w/enc.: R. Brauksieck  
A. Chieco  
T. McGuire

Code Council Meeting September 11, 2013  
Petroleum Bulk Storage Regulations  
6NYCRR Part 613

**Request:** ECL Article 17, Title 10 requires the DEC to consult with the Code Council to assure the PBS regulations are consistent. DEC is asking for the Code Council to review the PBS regulations and eventually submit a letter to DEC confirming no conflicts with the uniform fire prevention and building code.

**Why change is occurring:** Federal law change in Energy Policy Act of 2005, NYS Statute change in 2008, consolidation of all requirements into one regulation and adopting structure and definitions from EPA Part 280 regulation, clarification of existing language.

**Overview of Part 613:**

Scope

**Definition of Petroleum:**

- (at) (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; and
  - (iv) any petroleum mixture.
- (2) This term does not include:
  - (i) any hazardous substance covered under subdivision (ab) of this section, except as may be part of a blend described in section 613-1.3(au)(2) of this Part;
  - (ii) animal or vegetable oils; or
  - (iii) substances that are gases at standard temperature and pressure.
- (au) *Petroleum mixture* means:
  - (1) a mixture of any petroleum covered under sections 613-1.3(at)(1)(i) through (iii) of this Part;
  - (2) a blend that consists of:
    - (i) at least 70 percent by volume of the petroleum covered under sections 613-1.3(at)(1)(i) through (iii) of this Part (singly or in combination) and
    - (ii) one or more other substances, except any hazardous substance covered under section 613-1.3(ab)(1)(iv) of this Part; or
  - (3) a blend that consists of:
    - (i) one percent or more by volume of the petroleum covered under sections 613-1.3(at)(1)(i) through (iii) of this Part (singly or in combination) and
    - (ii) one or more other substances, other than hazardous substances covered under sections 613-1.3(ab)(1)(i), (ii), and (iv) of this Part.

**Definition of Facility:**

- (v) *Facility* means a single property, or contiguous or adjacent properties used for a

common purpose which are owned or operated by the same person or persons, on or in which are located:

- (1) one or more tank systems having a combined storage capacity of more than 1,100 gallons (including a major facility); or
- (2) an underground tank system having a storage capacity that is greater than 110 gallons.
- (3) This term does not include:
  - (i) any operational tank system;
  - (ii) any temporary tank system;
  - (iii) any tank system that is part of a facility that has been constructed, acquired, or operated in accordance with a Certificate of Public Convenience and Necessity issued by the Federal Energy Regulatory Commission pursuant to the terms of 15 U.S.C. section 717f;
  - (iv) any heating oil tank system used for on-premises consumption that is not interconnected to any other heating oil tank system and which has a storage capacity of less than 1,100 gallons, unless such tank system is located on a property that has another tank system or set of tank systems that otherwise independently meets the definition of facility under paragraphs (1) or (2) of this subdivision;
  - (v) any tank system that has a storage capacity of 1,100 gallons or less and is used to store motor fuel for non-commercial purposes (not for resale) at a farm or residence, unless such tank system or systems are located on a property that has another tank system or set of systems that otherwise independently meets the definition of facility under paragraphs (1) or (2) of this subdivision;
  - (vi) any tank system that is used to store or contain asphalt (however, a tank system used to store or contain asphaltic emulsions is included); or
  - (vii) any tank system that has been permanently closed in accordance with sections 613-2.6(b), 613-3.5(b), or 613-4.5(b) of this Part.

**Definition of Tank System:**

- (b) *Tank system* means a stationary device designed to store petroleum that is constructed of non-earthen materials that provide structural support. This term includes all associated piping and ancillary equipment. This term does not include a dispenser system; septic tank system; surface impoundment, pit, pond or lagoon; 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.

Overview of structure and requirements

<b>Subpart 613-1</b>	<b>General Provisions</b>
Sec. 613-1.1	Purpose
Sec. 613-1.2	Applicability

Sec. 613-1.3	Definitions
Sec. 613-1.4	Access to Records and Facilities
Sec. 613-1.5	Recordkeeping
Sec. 613-1.6	Preemption
Sec. 613-1.7	Approval of Local Laws or Ordinances
Sec. 613-1.8	Variances
Sec. 613-1.9	Registration
Sec. 613-1.10	References
Sec. 613-1.11	Severability

## **Subpart 613-2**

### **UST Systems Subject to Both Subtitle I and Title 10**

Sec. 613-2.1	UST Systems: Design, Construction, and Installation <i>This section sets equipment standards for tanks and piping (material of construction, corrosion protection, secondary containment), spill and overflow prevention equipment, installation, under-dispenser containment, valves.</i>
Sec. 613-2.2	General Operating Requirements <i>This section sets standards for delivery procedures, color coding of fillports, cathodic protection monitoring, compatibility, repairs allowed, protection from flooding</i>
Sec. 613-2.3	Leak Detection <i>This section sets standards for leak detection for tanks and piping</i>
Sec. 613-2.4	Reporting, Investigation, and Confirmation <i>This section requires reporting of suspected leaks, investigation due to off-site impacts, leak investigation and confirmation steps, response to spills and overfills</i>
Sec. 613-2.5	Operator Training <i>This section requires training of Class A, B and C operators</i>
Sec. 613-2.6	Out-of-Service UST Systems and Closure <i>This section sets standards for temporary and permanent closure of tank systems. Site Assessment required for permanent closure.</i>
Sec. 613-2.7	Financial Responsibility for Third-Party Bodily Injury

## **Subpart 613-3**

### **UST Systems Subject Only to Title 10**

Sec. 613-3.1	UST Systems: Design, Construction, and Installation <i>This section sets equipment standards for tanks and piping (material of construction, corrosion protection, secondary containment), spill and overflow prevention equipment, installation, valves.</i>
Sec. 613-3.2	General Operating Requirements <i>This section sets standards for delivery procedures, color coding of fillports, cathodic protection monitoring, compatibility, lining of tanks, protection from flooding</i>
Sec. 613-3.3	Leak Detection <i>This section sets standards for leak detection for tanks and piping</i>
Sec. 613-3.4	Reporting, Investigation, and Confirmation <i>This section requires reporting of suspected leaks, investigation due to off-site impacts, leak investigation and confirmation steps, response to spills and overfills</i>
Sec. 613-3.5	Out-of-Service UST Systems and Closure

*This section sets standards for temporary and permanent closure of tank systems.*

**Subpart 613-4**

**AST Systems**

Sec. 613-4.1

AST Systems: Design, Construction, and Installation

*This section sets equipment standards for tanks and piping (material of construction, corrosion protection, secondary containment), overfill prevention equipment, installation, valves.*

Sec. 613-4.2

General Operating Requirements

*This section sets standards for delivery procedures, color coding of fillports, cathodic protection monitoring, compatibility, repairs, protection from flooding*

Sec. 613-4.3

Inspections and Leak Detection

*This section sets standards for monthly and 10-year inspections, piping leak detection.*

Sec. 613-4.4

Reporting, Investigation, and Confirmation

*This section requires reporting of suspected leaks, investigation due to off-site impacts, leak investigation and confirmation steps, response to spills and overfills*

Sec. 613-4.5

Out-of-Service AST Systems and Closure

*This section sets standards for temporary and permanent closure of tank systems.*

**Subpart 613-5**

**Delivery Prohibition**

Sec. 613-5.1

Circumstances and Process for Imposing a Delivery Prohibition

Sec. 613-5.2

Prohibitions

Sec. 613-5.3

Notifications

Sec. 613-5.4

Termination of Delivery Prohibition

**Subpart 613-6**

**Release Response and Corrective Action**

Sec. 613-6.1

General

Sec. 613-6.2

Initial Response

Sec. 613-6.3

Initial Abatement Measures and Site Check

Sec. 613-6.4

Initial Site Characterization

Sec. 613-6.5

Free Product Removal

Sec. 613-6.6

Investigations for Soil and Groundwater Cleanup

Sec. 613-6.7

Corrective Action Plan

Sec. 613-6.8

Public Participation

## **PART 613 – Petroleum Bulk Storage**

### **Subpart 613-1**

Sec. 613-1.1	Purpose
Sec. 613-1.2	Applicability
Sec. 613-1.3	Definitions
Sec. 613-1.4	Access to Records and Facilities
Sec. 613-1.5	Recordkeeping
Sec. 613-1.6	Preemption
Sec. 613-1.7	Approval of Local Laws or Ordinances
Sec. 613-1.8	Variances
Sec. 613-1.9	Registration
Sec. 613-1.10	References
Sec. 613-1.11	Severability

### **General Provisions**

### **Subpart 613-2**

Sec. 613-2.1	UST Systems: Design, Construction, and Installation
Sec. 613-2.2	General Operating Requirements
Sec. 613-2.3	Leak Detection
Sec. 613-2.4	Reporting, Investigation, and Confirmation
Sec. 613-2.5	Operator Training
Sec. 613-2.6	Out-of-Service UST Systems and Closure
Sec. 613-2.7	Financial Responsibility for Third-Party Bodily Injury

### **UST Systems Subject to Both Subtitle I and Title 10**

### **Subpart 613-3**

Sec. 613-3.1	UST Systems: Design, Construction, and Installation
Sec. 613-3.2	General Operating Requirements
Sec. 613-3.3	Leak Detection
Sec. 613-3.4	Reporting, Investigation, and Confirmation
Sec. 613-3.5	Out-of-Service UST Systems and Closure

### **UST Systems Subject Only to Title 10**

### **Subpart 613-4**

Sec. 613-4.1	AST Systems: Design, Construction, and Installation
Sec. 613-4.2	General Operating Requirements
Sec. 613-4.3	Inspections and Leak Detection
Sec. 613-4.4	Reporting, Investigation, and Confirmation
Sec. 613-4.5	Out-of-Service AST Systems and Closure

### **AST Systems**

### **Subpart 613-5**

Sec. 613-5.1	Circumstances and Process for Imposing a Delivery Prohibition
Sec. 613-5.2	Prohibitions
Sec. 613-5.3	Notifications
Sec. 613-5.4	Termination of Delivery Prohibition

### **Delivery Prohibition**

**Subpart 613-6**

Sec. 613-6.1

Sec. 613-6.2

Sec. 613-6.3

Sec. 613-6.4

Sec. 613-6.5

Sec. 613-6.6

Sec. 613-6.7

Sec. 613-6.8

**Release Response and Corrective Action**

General

Initial Response

Initial Abatement Measures and Site Check

Initial Site Characterization

Free Product Removal

Investigations for Soil and Groundwater Cleanup

Corrective Action Plan

Public Participation

## **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 613-1.9 of this Part.

(c) Every carrier is subject to the provisions of sections 613-2.2(a)(7), 613-3.2(a)(7), 613-4.2(a)(6), and 613-5.4 of this Part.

(d) Any provision of this Part that imposes a requirement on a facility imposes that requirement on every operator and every 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 underground area* means an underground area – such as a basement, cellar, shaft, or vault – in which the entire tank is above the surface of the floor and any leak from the tank can be readily observed in the underground area.

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

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

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

(f) *Category 2 tank system* means any tank system whose tank was installed from December 27, 1986 through the effective date of this Part.

(g) *Category 3 tank system* means any tank system whose tank was installed after the

effective date of this Part.

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

(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 buried or submerged metal piping and tank systems. At a minimum, such persons must have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal tank systems, piping, and ancillary equipment.

(j) *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.

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

(l) *Class C operator* means the employee responsible 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.

(m) *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.

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

(o) *Corrosion expert* means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping and metal tanks. Such a person must be accredited or certified as being qualified by the NACE International or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping and metal tanks.

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

(q) *Design capacity* means the amount of petroleum that a tank is designed to hold. If a certain portion of a tank is unable to store petroleum because of its integral design (for

example, electrical equipment or other interior components take up space), the design capacity of the tank is thereby reduced. Actions taken to physically alter the design capacity of a tank (such as drilling a hole in the side of the tank so that it cannot hold petroleum above that point) will not change the design capacity of the tank.

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

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

(t) *Environment* means any water, water vapor, land including land surface or subsurface, air, fish, wildlife, biota, and all other natural resources, except for soil that is used as part of secondary containment for AST systems.

(u) *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.

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

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

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

(3) This term does not include:

(i) any operational tank system;

(ii) any temporary tank system;

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

(iv) any heating oil tank system used for on-premises consumption that is not interconnected to any other heating oil tank system and which has a storage capacity of less than 1,100 gallons, unless such tank system is located on a property that has another tank

system or set of tank systems that otherwise independently meets the definition of facility under paragraphs (1) or (2) of this subdivision;

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

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

(vii) any tank system that has been permanently closed in accordance with sections 613-2.6(b), 613-3.5(b), or 613-4.5(b) of this Part.

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

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

(y) *Flash point* means the temperature at which a liquid or volatile solid gives off vapor sufficient to form an ignitable mixture with air near the surface of the liquid or solid.

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

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

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

(i) a substance listed in tables 1 or 2 of Part 597 of this Title;

(ii) a substance that meets the criteria set forth in section 597.2 of this Title;

(iii) a hazardous substance mixture; or

(iv) a hazardous waste as identified or listed in Part 371 of this Title.

(2) Hazardous substance does not include petroleum as defined in subdivision

(at) of this section, except as may be part of a blend described in section 613-1.3(ac)(2) of this Part.

(ac) *Hazardous substance mixture* means:

(1) a mixture of any substances referred to under sections 613-1.3(ab)(1)(i) and (ii) of this Part;

(2) a blend that consists of:

(i) less than 70 percent by volume of the substances covered under sections 613-1.3(at)(1)(i) through (iii) of this Part (singly or in combination);

(ii) one percent or more by volume of one or more substances covered under sections 613-1.3(ab)(1)(i) and (ii) of this Part (singly or in combination); and

(iii) no substance covered under section 613-1.3(ab)(1)(iv) of this Part;

or

(3) a blend that consists of:

(i) one percent or more by volume of one or more substances covered under sections 613-1.3(ab)(1)(i) and (ii) of this Part (singly or in combination);

(ii) any substance not covered under sections 613-1.3(at)(1)(i) through (iii) of this Part; and

(iii) no substance covered under section 613-1.3(ab)(1)(iv) of this Part.

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

(ae) *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.

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

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

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

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

(aj) *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.

(ak) *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. Facilities with a combined design capacity of less than 400,000 gallons are not major facilities for the purposes of this Part.

(al) *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.

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

(an) *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.

(ao) *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 used for combustion in any context or as a raw material in a manufacturing process (for example, petroleum used in the manufacture of plastics). The term includes any hydraulic lift tank system, electrical cable oil reservoir, or electrical transformer.

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

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

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

(as) *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.

(at) (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; and

(iv) any petroleum mixture.

(2) This term does not include:

(i) any hazardous substance covered under subdivision (ab) of this section, except as may be part of a blend described in section 613-1.3(au)(2) of this Part;

(ii) animal or vegetable oils; or

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

(au) *Petroleum mixture* means:

(1) a mixture of any substances covered under sections 613-1.3(at)(1)(i) through (iii) of this Part;

(2) a blend that consists of:

(i) at least 70 percent by volume of the substances covered under sections 613-1.3(at)(1)(i) through (iii) of this Part (singly or in combination) and

(ii) one or more other substances, except any hazardous substance covered under section 613-1.3(ab)(1)(iv) of this Part; or

(3) a blend that consists of:

(i) one percent or more by volume of the substances covered under sections 613-1.3(at)(1)(i) through (iii) of this Part (singly or in combination) and

(ii) one or more other substances, other than hazardous substances

covered under sections 613-1.3(ab)(1)(i), (ii), and (iv) of this Part.

(av) *Pipe* or *piping* means a hollow cylinder made of non-earthen materials that is used for the conveyance of petroleum.

(aw) *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.

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

(ay) *Replaced* means:

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

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

(az) *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.

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

(bb) *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.

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

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

(be) *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.

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

(bg) *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.

(bh) *Subtitle I* means Subtitle I of the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6991 – 6992k, entitled “Regulation of Underground Storage Tanks.”

(bi) *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.

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

(bk) *Tank* means the main storage compartment of a tank system. Each section of a compartmented tank will be treated as an individual tank.

(bl) *Tank system* means a stationary device designed to store petroleum that is constructed of non-earthen materials that provide structural support. This term includes all associated piping and ancillary equipment. This term does not include a dispenser system; septic tank system; surface impoundment, pit, pond or lagoon; 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.

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

(bn) *Temporary tank system* means a tank system that is installed for use at a location for no more than 90 days during any 12-month period.

(bo) *Tightness test* means a test that is capable of detecting a leak from a tank system of 0.1 gallons per hour with a probability of detection of at least 95 percent and a probability of false alarm of no more than five percent (with a threshold for declaring a leak of 0.05 gallons 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 of the test method.

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

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

(br) *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. This term does not include a tank system situated in an “accessible underground area.”

(bs) *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).

(bt) *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.

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

613-1.4 Access to Records and Facilities

(a) 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 enter and inspect a facility for purposes of assuring compliance with provisions of this Part.

613-1.5 Recordkeeping

(a) Every facility must maintain the following information:

<b>Table 1: Required Records</b>		
<b><u>Reference</u></b>	<b><u>Record</u></b>	<b><u>Timeframe</u></b>
<b>613-1</b>		
613-1.9(a)	Registration Certificate	5 years
<b>613-2</b>		
-2.1(b)(4)	Installation records (as-built diagrams, manufacturer checklists)	Life of tank system

-2.1 (c)	Lining inspection	5 years
-2.2(b)(4)	Cathodic protection monitoring records - 60-day reading of impressed current - Annual monitoring	3 years
-2.2(c)	Compatibility	No record required
-2.2(d)	Repairs	Life of tank system
-2.3(e)	Leak detection - Inventory monitoring - Daily readings - Reconciliations - Tank/line testing - Weekly monitoring of LD - Annual ALLD operational test	3 years 3 years 3 years Until next test is conducted 3 years 3 years
-2.3(e)(3)	Leak detection repair	3 years after repair
-2.4(a)(2)	Reporting, Investigation and Confirmation - Reporting of suspected leaks	3 years
-2.5(f)	Operator Training	3 years
-2.6(e)	Closure - Closure record - Site assessment	Forward to Department 3 years
-2.7(p)	Financial Responsibility	Life of tank system
<b>613-3</b>		
-3.1(b)(4)	Installation records (as-built diagrams, manufacturer checklists)	Life of tank system
-3.2(b)(4)	Cathodic protection monitoring records - 60-day reading of impressed current - Annual monitoring	3 years 3 years
-3.2(c)	Compatibility	No record required
-3.2(d)	Repairs	Life of tank system
-3.3(e)	Leak detection - Tank/line testing - Weekly monitoring of LD	Until next test is conducted 3 years
-3.3(e)(3)	Leak detection repair	3 years after repair
-3.4	Reporting, Investigation and Confirmation	No record required
-3.5(e)	Closure - Closure record - Site assessment	Forward to DEC 3 years
<b>613-4</b>		
-4.1(b)(4)	Installation records (testing)	No record required

-4.2(b)(4)	Cathodic protection monitoring records - 60-day reading of impressed current - Annual monitoring	3 years 3 years
-4.2(c)	Compatibility	No record required
-4.2(d)	Repairs	Life of tank system
-4.3(e)	Leak detection - Monthly inspection - 10-year inspection - Annual test of ALLD	3 years 10 years 3 years
-4.4	Reporting, Investigation, and Confirmation	No record required
-4.5(c)	Closure - Closure record	Forward to DEC

(b) *Availability and maintenance of records.*

(1) Every facility must maintain all records (in hard copy or electronic format) and make them available to the Department within three business days following the Department's request, except for the results of the last 30 days of leak detection monitoring, which must be available at the facility at all times.

(2) In the case of permanent closure or change-in-service records required under section 613-2.6(e) of this Part, or permanent closure records required under sections 613-3.5(e) and 613-4.5(c) of this Part, the facility must transmit the records to the Department no later than 30 days after permanent closure or change in service.

613-1.6 Preemption

(a) Except where the Department has approved a local law or ordinance under section 613-1.7 of this Part, any local law or ordinance for the protection of public health or the environment which is inconsistent with the provisions of this Part 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, or any major facility.

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 city or county law or ordinance provides environmental protection equal to or greater than:

- (1) the requirements of ECL Article 17, Title 10;

- (2) the enforcement requirements of ECL Article 71; and
- (3) the requirements of this Part.

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

- (1) include a copy of the local law or ordinance that established a local program;
- (2) explain differences and inconsistencies between the local law or ordinance and the provisions of this Part and include a line-by-line comparison of the local law or ordinance;
- (3) identify enforcement procedures, penalties, and resources available to implement the local law or ordinance;
- (4) identify local fees that would be levied;
- (5) contain a declaration of intent to administer and enforce the local law or ordinance; and
- (6) 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) The Department will review every application and will issue written findings and terms of approval, conditional approval, or disapproval.

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

(e) Every county or city administering an approved local program must, at least 180 days prior to the expiration of local program approval, apply to the Department for renewal of the Department's approval.

(f) Every county or city administering an approved local program on the effective date of this Part, within 180 days after the effective date of this Part, re-apply to the Department for approval of the existing local law or ordinance.

(g) *Department's continuing jurisdiction.* 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 register only with such city or county.

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

(1) all information releasable under the Freedom of Information Law, Public Officers Law sections 84-90, regarding every facility subject to the local program be made available to the public on the internet;

(2) prior notice be given to the Department of the imposition of any delivery prohibition on a facility;

(3) every facility be inspected by the City or County at no less than a three year interval;

(4) inspection results, compliance determinations, and information regarding any enforcement action be submitted to the Department;

(5) notify the Department at least 180 days prior to any change to the approved program's local law or ordinance; and

(6) notify the Department at least 180 days prior to any change to the city or county enforcement policies, procedures, penalties, or resources available to implement the local law or ordinance.

(i) *Rescission of approval of a local law or ordinance.* If the Department determines that an approved city or county 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 to effectively and properly administer and enforce the local law or ordinance within 60 days, the Department will rescind approval. Upon such rescission, the city or county must immediately notify every facility previously subject to the local program that the city or county no longer regulates the facility, the Department solely regulates the facility, and the facility must register with the Department and pay the registration fee in accordance with section 613-1.9(e) of this Part within 30 days after the Department's approval was rescinded. 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.

#### 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 noncompliance 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.* The facility owner must obtain an initial or revised registration certificate from the Department prior to the first receipt of petroleum into a new or replaced tank system.

(b) *Renewal.* Registration must be renewed every five years from 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 sections 613-2.6(b), 3.5(b), or 4.5(b) of this Part, or that ownership of the facility has been transferred in accordance with subdivision (d) of this section.

(c) *Transition from earlier regulation.* Unless the registration certificate must be revised or newly issued pursuant to the terms of subdivisions (a) or (d) of this section, a registration certificate held by a facility on the effective date of this Part that was issued pursuant to terms of the former Part 612 of this Title remains valid until the expiration date recorded on the certificate.

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

(e) *Application procedure.*

(1) The facility owner must apply for a registration certificate using forms or electronic means as provided by the Department. Forms are available online at [www.dec.ny.gov](http://www.dec.ny.gov)

and at all Department offices.

(2) Each application 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.

(3) The application must be signed by the facility owner or an authorized representative of the facility owner.

(4) Every application for a registration certificate must be accompanied by payment of the applicable per-facility registration fee as shown in Table 2.

(5) The facility owner must certify that financial responsibility required by section 613-2.7 of this Part for every tank at the facility has been obtained.

(f) *Registration certificate.* Upon submittal of a complete registration application and payment of the applicable registration fee, the Department will issue a registration certificate. The current registration certificate must be displayed at all times in a conspicuous location at the facility.

(g) *Advance notification of installation of a tank.* When a facility intends to install a tank, the facility owner, or authorized representative of the facility owner, must notify the Department of this action at least 30 days prior to installing the tank and certify that financial responsibility required by section 613-2.7 of this Part has been obtained for the tank. For any tank added to a previously registered facility, any increased fee applicable to the facility will not be assessed until the registration is due for renewal.

<b>Total Design Capacity of All Tanks At the Facility</b>	<b>Fee Per Facility</b>
Greater than 110 gallons to 1,100 gallons	\$0
Greater than 1,100 to 2,000 gallons	\$100
Greater than 2,000 gallons to less than 5,000 gallons	\$300
5,000 gallons to less than 400,000 gallons	\$500

#### 613-1.10 References

The following technical standards are incorporated by reference. These references are available for inspection and copying at (1) the offices of the Department's Division of Environmental Remediation, located at 625 Broadway, Albany, NY 12233; (2) the Department of State, Division of Administrative Rules, One Commerce Plaza, 99 Washington Avenue, Suite

650, Albany, NY 12231; or (3) the source listed for the given reference.

- (a) American Petroleum Institute (API)  
1220 L Street, NW, Washington, DC 20005-4070
- (1) RP 651, "Cathodic Protection of Aboveground Petroleum Storage Tanks," 3<sup>rd</sup> 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," 3<sup>rd</sup> edition, March 1996.
  - (4) RP 1615, "Installation of Underground Hazardous Substances or Petroleum Storage Systems," 6<sup>th</sup> edition, April 2011.
  - (5) RP 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks," 5<sup>th</sup> edition, June 2001.
  - (6) RP 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," 1<sup>st</sup> edition, January 1983.
  - (7) RP 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," 3<sup>rd</sup> edition, January 1996 (revised 2002).
  - (8) RP 1637, "Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals," 3<sup>rd</sup> edition, July 2006.
  - (9) RP 2016, "Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks," 1<sup>st</sup> edition, August 2001.
  - (10) RP 2200, "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines," 4<sup>th</sup> edition, September 2010.
  - (11) Standard 620, "Recommended Rules for Design and Construction of Large, Welded, Low-Pressure Storage Tanks," 7<sup>th</sup> edition, September 1982 (revised April 1985).
  - (12) Standard 620, "Design and Construction of Large, Welded, Low-Pressure Storage Tanks," 11<sup>th</sup> edition, February 2008.
  - (13) Standard 650, "Welded Steel Tanks for Oil Storage," 7<sup>th</sup> edition, February 1984.

- (14) Standard 650, “Welded Steel Tanks for Oil Storage,” 12<sup>th</sup> edition, March 2013.
  - (15) Standard 653, “Tank Inspection, Repair, Alteration, and Reconstruction,” 4<sup>th</sup> edition, April 2009.
  - (16) Standard 2015, “Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry from Decommissioning Through Recommissioning,” 6<sup>th</sup> edition, August 2001.
- (b) Fiberglass Tank and Pipe Institute (FTPI)  
11150 South Wilcrest Drive, Suite 101, Houston, TX 77099-4343
- RP T-95-02, “Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks,” 2<sup>nd</sup> edition, January 1995.
- (c) 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.
- (d) NACE International (NACE)  
1440 South Creek Drive, Houston, TX 77084-4906
- (1) RP-01-69, “Recommended Practice – Control of External Corrosion on Underground or Submerged Metallic Piping Systems,” January 1983 revision.
  - (2) RP0193-2001, “External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms,” 2001 edition.
  - (2) SP0169-2007, “Control of External Corrosion on Underground or Submerged Metallic Piping Systems,” 2007 edition.
  - (3) SP0285-2011 (formerly RP0285), “Corrosion Control of Underground Storage Tanks by Cathodic Protection,” 2011 edition.
  - (4) TM0101-2012, “Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems,” 2012 edition.
  - (5) TM0497-2012, “Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems,” 2012 edition.
- (e) National Fire Protection Association (NFPA)

1 Batterymarch Park, Quincy, MA 02169-7471

- (1) NFPA 30, “Flammable and Combustible Liquids Code,” 1984 edition.
  - (2) NFPA 30, “Flammable and Combustible Liquids Code,” 2012 edition.
  - (3) NFPA 30A, “Automotive and Marine Service Station Code,” 1984 edition.
  - (4) NFPA 30A, “Code for Motor Fuel Dispensing Facilities and Repair Garages,” 2012 edition.
  - (5) NFPA 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair,” 2010 edition.
  - (6) NFPA 385, “Standard for Tank Vehicles for Flammable and Combustible Liquids,” 2012 edition.
- (f) National Leak Prevention Association (NLPA)  
No published address; phone – 815-301-2785
- NLPA 631A, “Entry, Cleaning, Interior Inspection, Repair, and Lining of Underground Storage Tanks.”
- (g) 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.
- (h) 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<sup>®</sup>: Specification for External Corrosion Protection of FRP Composite Steel USTs,” revised January 2013.
  - (3) F922, “Permatank<sup>®</sup>: Specification for Permatank<sup>®</sup>,” revised January 2013.
  - (4) F961, “ACT-100U<sup>®</sup>: Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks,” revised January 2013.
  - (5) R051, “Cathodic Protection Testing Procedures for sti-P<sub>3</sub><sup>®</sup> 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-P<sub>3</sub><sup>®</sup> USTs," revised December 2010.
  - (8) SP001, "Standard for the Inspection of Aboveground Storage Tanks," 5th Edition, revised September 2011.
  - (9) sti-P<sub>3</sub><sup>®</sup>, "Specifications for sti-P<sub>3</sub><sup>®</sup> System for External Corrosion Protection of Underground Steel Storage Tanks," July 1983.
  - (10) sti-P<sub>3</sub><sup>®</sup>, "Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks," revised January 2013.
- (i) Underwriters Laboratories (UL)  
333 Pfingsten Road, Northbrook, IL 60062-2096
- (1) UL 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," April 1981 edition.
  - (2) UL 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," December 1996 edition.
  - (3) UL 80, "Standard for Steel Tanks for Oil-Burner Fuels and Other Combustible Liquids," September 2007 edition.
  - (4) UL 142, "Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids," January 1985 edition.
  - (5) UL 142, "Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids," December 2006 edition.
  - (6) UL 971, "Standard for Nonmetallic Underground Piping for Flammable Liquids," February 2006 edition.
  - (7) UL 971A, "Metallic Underground Fuel Pipe," October 2006 edition.
  - (8) UL 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Tanks for Petroleum Products," July 1983 edition.
  - (9) UL 1316, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures," January

1994 edition.

- (10) UL 1746, "Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks," January 2007 edition.
  - (11) UL 2258, "Nonmetallic Tanks for Oil-Burner Fuels and Other Combustible Liquids," August 2010 edition.
- (j) Underwriters Laboratories of Canada (ULC)  
7 Underwriters Road, Toronto, ON, Canada M1R 3A9
- (1) CAN-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 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.

## **Subpart 613-2 UST Systems Subject to Both Subtitle I and Title 10**

### 613-2.1 UST Systems: Design, Construction, and Installation

(a) *Applicability.* The provisions of this Subpart apply to every UST system that is part of a facility except for a UST system that is subject to Subpart 613-3 of this Part. Every UST system covered by this Subpart is subject to regulation pursuant to Subtitle I and Title 10.

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

(1) **Tanks.** Each tank must be properly designed and constructed, and any portion underground that routinely contains petroleum must be protected from corrosion, as specified in subparagraphs (i) through (iii) of this paragraph. In addition, all new or replaced tanks where installation began after December 27, 1986 must be secondarily contained in accordance with subparagraph (iv) of this paragraph:

(i) Every tank made of fiberglass-reinforced plastic (FRP) must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(a) For Category 2 USTs:

(1) UL 1316, July 1983; or

(2) CAN4-S615-M83, 1983.

(b) For Category 3 USTs:

(1) UL 1316, January 1994; or

(2) ULC-S615-98, 1998.

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

(a) The tank must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(1) For Category 2 USTs:

- (i) UL 58, April 1981; or
    - (ii) ULC-S603-M1981, 1981.
  - (2) For Category 3 USTs:
    - (i) UL 58, December 1996; or
    - (ii) ULC-S603-00, 2000.
- (b) The tank must be cathodically protected in the following manner:
  - (1) The tank must be coated with a suitable dielectric material;
  - (2) The cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):
    - (i) For Category 2 USTs:
      - (A) API RP 1632, January 1983;
      - (B) ULC-S603.1-M1982, 1982;
      - (C) sti-P<sub>3</sub><sup>®</sup>, July 1983; or
      - (D) NACE RP-01-69, January 1983.
    - (ii) For Category 3 USTs:
      - (A) sti-P<sub>3</sub><sup>®</sup>, January 2013;
      - (B) UL 1746, January 2007;
      - (C) ULC-S603-00, 2000;
      - (D) STI F841, January 2006; or
      - (E) NACE SP0285-2011, 2011.
  - (3) Every field-installed cathodic protection system must be designed by a corrosion expert;

(4) Every impressed current system must be designed to allow determination of current operating status as required in section 613-2.2(b)(3) of this Part; and

(5) Every cathodic protection system must be operated and maintained in accordance with section 613-2.2(b) of this Part.

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

(a) The tank must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(1) For Category 2 USTs:

(i) UL 58, April 1981; or

(ii) ULC-S603-M1981, 1981.

(2) For Category 3 USTs:

(i) UL 58, December 1996; or

(ii) ULC-S603-00, 2000.

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

(1) The tank must be electrically insulated from the piping system with dielectric fittings, bushings, washers, sleeves, or gaskets which are chemically stable when exposed to petroleum, petroleum additives, or corrosive soils.

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

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

(c) The tank in a Category 3 UST system must be clad or jacketed with a non-corrodible material which is designed, fabricated, and installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(1) UL 1746, January 2007;

(2) STI F894, January 2013;

(3) STI F961, January 2013; or

(4) STI F922, January 2013.

(iv) Every tank must be secondarily contained according to the following.

(a) Every secondarily contained tank must:

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

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

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

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

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

(ii) Outer jackets made of steel must have a minimum thickness of 10-gauge and be coated as prescribed in section 613-2.1(b)(1)(ii)(b)(1) or 613-2.1(b)(1)(iii)(b)(2) of this Part;

(iii) There are no penetrations of any kind through the jacket to the tank except top entry manholes and fittings required for filling the tank,

venting the tank, or monitoring the interstitial space;

(iv) The outer jacket must cover at least the bottom 80 percent of the tank; and

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

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

(3) Cut-off walls. If a cut-off wall is used:

(i) The cut-off wall may be used only where groundwater levels are above the bottom of the tank excavation.

(ii) A cut-off wall must consist of an impermeable barrier which has a permeability rate to water equal to or less than  $1 \times 10^{-6}$  cm/sec. It must not deteriorate in an underground environment and in the presence of petroleum.

(iii) A cut-off wall must extend around the perimeter of the excavation and to an elevation below the lowest groundwater level.

(iv) If a synthetic membrane is used for a cut-off wall, any seams, punctures, or tears in the membrane must be repaired and made leak-tight prior to backfilling. No penetrations of the cut-off wall are allowed.

(v) Impervious native soil may serve as a cut-off wall when the impervious soil is continuous and is of sufficient depth, thickness, and extent to contain a leak. The soil must have a permeability rate to water equal to or less than  $1 \times 10^{-6}$  cm/sec.

(4) Impervious underlayment.

(i) An impervious underlayment may be used only under a tank at sites where groundwater levels are below the bottom of the excavation and where soils are well drained. This underlayment must have a permeability rate to water equal to or less than  $1 \times 10^{-6}$  cm/sec and must not deteriorate in an underground environment and in the presence of petroleum. The underlayment may consist of impervious native soils, an impervious

concrete pad, a synthetic membrane, or any equivalent material. If a synthetic membrane is used, any seams, punctures, or tears must be repaired prior to backfilling.

(ii) The underlayment must extend at least one foot beyond the sides and ends of the tank and must have a slope to the sump of at least one-quarter inch per foot. An observation well as required in section 613-2.3(c) of this Part must be positioned in the sump and extend to the surface of the excavation for the purpose of sampling for leakage and pumping out water or product which may accumulate.

(iii) Surface waters must be drained from the site using good engineering practices. This may include capping the site with asphalt, concrete, or other impervious cover which is sloped to drainways leading away from the tanks.

(c) Every tank in a Category 3 UST system must be double-walled and must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

- (1) UL 58, December 1996;
- (2) UL 1316, January 1994;
- (3) UL 1746, January 2007;
- (4) STI F841, January 2006; or
- (5) STI F922, January 2013.

(2) Piping. Piping that routinely contains petroleum and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with a code of practice specified in subparagraphs (i) or (ii) of this paragraph. In addition, except for suction piping that meets the requirements of sections 613-2.3(b)(2)(i)(b)(1) through (4) of this Part, all piping where installation began after the effective date of this Part must be secondarily contained in accordance with subparagraph (iii) of this paragraph. The entire piping run must be replaced when 50 percent or more of a piping run is replaced.

(i) All piping made of a non-corrodible material must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

- (a) UL 971, February 2006; or
- (b) ULC-S660-08, 2008.

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

(a) The piping must be coated with a suitable dielectric material;

(b) The cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

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

(2) UL 971A, October 2006;

(3) STI R892, January 2006;

(4) NACE SP0169-2007, 2007; or

(5) NACE SP0285-2011, 2011.

(c) Every field-installed cathodic protection system must be designed by a corrosion expert;

(d) Every impressed current system must be designed to allow determination of current operating status as required in section 613-2.2(b)(3) of this Part; and

(e) Every cathodic protection system must be operated and maintained in accordance with section 613-2.2(b) of this Part.

(iii) All piping that is secondarily contained for which installation began after the effective date of this Part must meet the following conditions.

(a) Piping that is secondarily contained must:

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

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

(b) All piping must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(1) UL 971, February 2006; or

(2) UL 971A, October 2006.

(3) Spill and overflow prevention equipment.

(i) Except as provided in subparagraph (ii) of this paragraph, to prevent spilling and overfilling associated with petroleum transfer to the UST system, the facility must use the following spill and overfill prevention equipment:

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

(b) Overfill prevention equipment that will:

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

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

(3) Restrict flow 30 minutes prior to overfilling, alert the operator or carrier with a high-level alarm one minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to product due to overfilling.

(ii) A facility is not required to use the spill and overfill prevention equipment specified in subparagraph (i) of this paragraph if the UST system is filled by transfers of no more than 25 gallons at one time.

(4) Installation.

(i) Every tank and its associated piping must be properly installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(a) API RP 1615, April 2011;

(b) PEI RP100, 2011 edition; or

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

(ii) As-built information records and installer certification. The facility must maintain the following information:

(a) an accurate diagram showing:

(1) the location of:

- (i) each UST and its associated piping, including registration identification number;
- (ii) dispensers or loading equipment;
- (iii) check valves;
- (iv) transition sumps (if any); and
- (v) monitoring or recovery wells (if any).

(2) the following tank system attributes:

- (i) physical dimensions of each tank (approximation if not known); and
- (ii) installation date for each portion of piping that was installed at a different time (approximation if not known).

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

(b) for each newly installed component of a tank system, a signed statement by the installer certifying that the tank system component was installed in compliance with subparagraph (i) of this paragraph; and

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

(5) Dispenser systems. Each UST system 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 underground 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 in the containment system or be continuously monitored for leaks from the dispenser system.

(6) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. A valve meeting the standards set forth in NFPA 30A, section 4-3.6 (1984 edition, for Category 2 tank systems) meets the requirements of this subparagraph.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the tank system in case of piping or dispenser hose failure. A valve meeting the standards set forth in NFPA 30A, section 2-1.7 (1984 edition, for Category 2 tank systems) meets this requirement.

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

(iv) Each tank connection through which petroleum can normally flow must be equipped with an operating valve to control the flow. A valve which meets the standards set forth in NFPA 30, section 2-2.7.1 (1984 edition, for Category 2 tank systems) meets the requirements of this subparagraph.

(c) *Equipment standards for Category 1 UST systems.*

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

(i) Category 2 and 3 UST system equipment standards under subdivision (b) of this section;

(ii) The requirements in paragraphs (2) through (5) of this subdivision;  
or

(iii) The permanent closure requirements of section 613-2.6(b) of this Part and applicable corrective action requirements established in Subpart 613-6 of this Part.

(2) Tank requirements. Every steel tank must meet one of the following requirements in accordance with a code of practice as noted below:

(i) Internal lining. Within ten years after lining, and every five years thereafter, a lined tank must be internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications. A report detailing the

inspection results must be maintained for five years. If the internal lining is no longer performing in accordance with original design specifications and cannot be repaired according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references), then the lined tank must be permanently closed in accordance with section 613-2.6(b) of this Part.

(a) API RP 1631, June 2001;

(b) NLPA 631A; or

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

(ii) Cathodic protection. Tanks having cathodic protection must meet the requirements of sections 613-2.1(b)(1)(ii)(b), (c), and (d) of this Part.

(iii) Internal lining combined with cathodic protection. Tanks with both internal lining and cathodic protection must have the following:

(a) an internal lining that was installed in accordance with the requirements of section 613-2.2(d) of this Part; and

(b) a cathodic protection system that meets the requirements of sections 613-2.1(b)(1)(ii)(b), (c), and (d) of this Part.

(3) Piping requirements. Metal piping that routinely contains petroleum and is in contact with the ground must be cathodically protected in accordance with a code of practice listed in section 613-2.1(b)(2)(ii)(b) of this Part and must meet the requirements of sections 613-2.1(b)(1)(ii)(b), (c), and (d) of this Part.

(4) Spill and overflow prevention equipment. To prevent spilling and overflowing associated with petroleum transfer to the UST system, every Category 1 UST system must comply with Category 2 and 3 UST system spill and overflow prevention equipment requirements specified in section 613-2.1(b)(3) of this Part.

(5) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. A valve meeting the standards set forth in NFPA 30A, section 4-3.6 (1984 edition, for Category 2 tank systems) meets the requirements of this subparagraph.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream

from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the tank system in case of piping or dispenser hose failure. A valve meeting the standards set forth in NFPA 30A, section 2-1.7 (1984 edition, for Category 2 tank systems) meets this requirement.

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

(iv) Each tank connection through which petroleum can normally flow must be equipped with an operating valve to control the flow. A valve which meets the standards set forth in NFPA 30, section 2-2.7.1 (1984 edition, for Category 2 tank systems) meets the requirements of this subparagraph.

## 613-2.2 General Operating Requirements

### (a) *Spill and overfill prevention.*

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

(2) The facility must report, investigate, and clean up any spills and overfills in accordance with section 613-2.4(d) of this Part.

(3) Every Category 2 or 3 tank must have a label at the fill port specifying tank registration identification number, tank design and working capacities, and type of petroleum stored.

(4) Every tank system fill port must be color coded in accordance with API RP 1637. If a tank contains petroleum that does not have a corresponding API color code, the facility must otherwise permanently mark the fill port (for example, with stenciled letters) to identify the petroleum in the tank.

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

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

(7) Delivery of petroleum to a tank system.

(i) Immediately prior to a delivery, the carrier must determine that the

tank has available working capacity to receive the volume of petroleum to be delivered. Every aspect of the delivery must be monitored and immediate action must be taken to stop the flow of petroleum when the working capacity of the tank has been reached or should an equipment failure or emergency occur.

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

(b) *Operation and maintenance of corrosion protection.* All facilities having metal UST systems with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented until the UST system is permanently closed or undergoes a change in service pursuant to section 613-2.6(b) of this Part:

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

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

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

(ii) Inspection criteria. One of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references) must be used to determine that cathodic protection is adequate:

(a) NACE TM0101-2012, 2012 edition;

(b) NACE TM0497-2012, 2012 edition;

(c) STI R051, January 2006;

(d) NACE SP0285-2011 (formerly RP0285), 2011 edition; or

(e) NACE SP0169-2007, 2007 edition.

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

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

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

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

(1) Any repair to a UST system must be properly conducted according to one of the following codes of practice (refer to section 613-1.10 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) NLPA 631A;
- (vi) STI R972, December 2010;
- (vii) NACE SP0285-2011 (formerly RP0285), 2011 edition; or
- (viii) FTPI RP T-95-02, January 1995.

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

(3) Repaired tanks and piping must be tightness tested in accordance with sections 613-2.3(c)(3) and (d)(2) of this Part, respectively, within 30 days following the date of the completion of the repair, unless one of the following conditions is met:

(i) The repaired tank is internally inspected in accordance with API RP 1631; or

(ii) The repaired portion of the UST system is monitored for releases in accordance with a method specified in sections 613-2.3(c)(4) through (8) of this Part.

(4) Within six months following the repair of any UST system that is cathodically protected, the cathodic protection system must be tested in accordance with sections 613-2.2(b)(2) and (3) of this Part to ensure that it is operating properly.

(5) Every facility must maintain records of each repair until the UST system is

permanently closed or undergoes a change in service pursuant to section 613-2.6(b) of this Part.

(e) *Tank systems in locations subject to flooding.* For a tank system located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water, the facility must maintain safeguards in accordance with sections 2.3.2.6 and 2.3.3.5 of NFPA 30 (1984 edition) for Category 2 tank systems. 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 if the discharge would contravene the standards of Parts 701, 702 or 703 of this Title.

### 613-2.3 Leak Detection

(a) *Leak detection requirements for all UST systems.*

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

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

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

(iii) Meets the requirements of subdivisions (c) and (d) of this section, as applicable. In addition, the methods listed in sections 613-2.3(c)(2), (c)(4), (c)(8), (c)(9), (d)(1), and (d)(2) of this Part must be capable of detecting the leak rate or quantity specified for that method in the corresponding section of the rule with a probability of detection of 95 percent and a probability of false alarm of five percent.

(2) When a leak detection method operated in accordance with the requirements of subdivisions (c) and (d) of this section indicates that a leak may have occurred, facilities must notify the Department in accordance with section 613-2.4(a) of this Part.

(3) Additional testing and inspection. When a leak is suspected, or where tests or inspections required by this Part have not been performed, or where accurate inventory monitoring records are not kept and reconciled as required under section 613-2.3(c)(1) of this Part, the Department may order the facility to inspect and to test the tank system or equipment for tightness. If the facility fails to conduct such tests and inspections within ten days of receipt of the Department's order, the Department may conduct inspections or tests for tightness. The expenses of conducting such tests as ordered by the Department must be paid by the tank system owner.

(4) A facility that cannot implement a method of leak detection that complies with the requirements of this section must temporarily take the UST system out of service

pursuant to section 613-2.6(a) of this Part.

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

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

(i) Any tank that is part of a Category 1 UST system must be monitored for leaks at weekly intervals using one of the methods listed in sections 613-2.3(c)(2) and (c)(4) through (c)(9) of this Part. Additionally, any tank system storing motor fuel or kerosene exclusively for resale must meet the ten-day inventory monitoring requirements in section 613-2.3(c)(1) of this Part.

(ii) Any tank that is part of a Category 2 or 3 UST system must be monitored for leaks at weekly intervals in accordance with section 613-2.3(c)(7) of this Part. Additionally, any tank system storing motor fuel or kerosene exclusively for resale must meet the ten-day inventory monitoring requirements in section 613-2.3(c)(1) of this Part.

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

(i) Piping that is part of a Category 1 or 2 tank system must meet one of the following requirements:

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

(1) Be equipped with an automatic line leak detector that is operated in accordance with section 613-2.3(d)(1) of this Part; and

(2) Have an annual line tightness test conducted in accordance with section 613-2.3(d)(2) of this Part or have monitoring conducted at weekly intervals in accordance with section 613-2.3(d)(3) of this Part.

(b) Suction piping. Piping that conveys petroleum under suction must either have a line tightness test conducted at least every three years and in accordance with section 613-2.3(d)(2) of this Part, or use a monitoring method conducted at weekly intervals in accordance with section 613-2.3(d)(3) of this Part. No leak detection is required for suction piping that is shown by the facility to be designed and constructed to meet the following standards:

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

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

line; and

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

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

(ii) Piping that is part of a Category 3 UST system, or that is newly installed as part of a Category 1 or 2 UST system after the effective date of this Part, must meet one of the following requirements:

(a) Pressurized piping. Piping that conveys petroleum under pressure must be monitored for leaks at weekly intervals in accordance with section 613-2.3(c)(7) of this Part and be equipped with an automatic line leak detector in accordance with section 613-2.3(d)(1) of this Part.

(b) Suction piping. Piping that conveys petroleum under suction must be monitored for leaks at weekly intervals in accordance with section 613-2.3(c)(7) of this Part. No leak detection is required for suction piping that meets sections 613-2.3(b)(2)(i)(b)(1) through (4) of this Part.

(c) *Methods of leak detection for tanks.* Each method of leak detection for tanks used to meet the requirements of subdivision (b) of this section must be conducted in accordance with the following:

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

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

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

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

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

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

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

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

(a) The tank has a recurring accumulation of water within the ten-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 tank system, or

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

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

(i) Tank petroleum level measurements are taken at the beginning and ending of a period, as set forth in subparagraph (iv) of this paragraph, during which no petroleum is added to or removed from the 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 613-2.4 of this Part if the variation between beginning and ending measurements exceeds the weekly or monthly standards in Table 3.

<b>Table 3: Manual Tank Gauging</b>			
<b>Design Capacity of Tank</b>	<b>Minimum Duration of Test</b>	<b>Weekly Standard (One Test)</b>	<b>Monthly Standard (Four-Test Average)</b>
550 gallons or less	36 hours	10 gallons	5 gallons
551-1,000 gallons (when tank diameter is 64")	44 hours	9 gallons	4 gallons
551-1,000 gallons (when tank diameter is 48")	58 hours	12 gallons	6 gallons

(v) Tanks of 550 gallons or less design capacity and tanks with a design capacity of 551 to 1,000 gallons that meet the tank diameter criteria in Table 3 may use this as the sole method of release detection. Tanks of greater than 1,000 gallons design capacity may not use this method to meet the requirements of this Subpart.

(3) Tank tightness testing. Tank tightness testing (or another test of equivalent performance) must be capable of detecting a leak at the rate of 0.1 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 product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

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

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

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

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

(b) Continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the 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 (for example, gravel, sand, crushed rock) to readily allow diffusion of vapors from leaks into the excavation area;

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

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

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

(v) The vapor monitors are designed and operated to detect any significant increase in concentration above background of the petroleum stored in the tank

system, a component or components of that substance, or a tracer compound placed in the tank system;

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

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

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

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

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

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

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

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

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

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

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

(7) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used if the system is designed,

constructed and installed to detect a leak from any portion of the tank that routinely contains petroleum; if the system meets one of the requirements set forth in subparagraphs (i) through (iii) of this paragraph; and if the facility records, at weekly intervals, the results of the interstitial monitoring, including continuous monitoring.

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

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

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

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

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

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

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

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

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

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

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

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

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

(9) Other methods.

(i) Any other type of leak detection method, or combination of methods, can be used if it can detect a leak at the rate of 0.2 gallons per hour or a leak of 150 gallons within a month with a probability of detection of 95 percent and a probability of false alarm of five percent.

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

(d) *Methods of leak detection for piping.* Each method of leak detection for piping used to meet the requirements of section 613-2.3(b)(2) of this Part must be conducted in accordance with the following:

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

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

(3) Applicable leak detection methods. Any of the methods in sections 613-2.3(c)(5) through (8) of this Part may be used if they are designed to detect a leak from any portion of the piping that routinely contains petroleum.

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

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

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

(3) Written documentation of all calibration, maintenance, and repair of leak detection equipment permanently located on-site must be maintained for at least three years after

the servicing work is completed. Any schedules of required calibration and maintenance provided by the leak detection equipment manufacturer must be retained for three years from the date of installation.

#### 613-2.4 Reporting, Investigation, and Confirmation

(a) *Reporting of suspected leaks.*

(1) Facilities must report a suspected leak to the Department's Spill Hotline (518-457-7362) within two hours and follow the procedures in subdivision (b) of this section for any of the following conditions:

(i) The discovery of petroleum outside of a tank system at the facility or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water).

(ii) Unusual operating conditions observed (such as the erratic behavior of petroleum-dispensing equipment, the sudden loss of product from the tank system, an unexplained presence of water in the tank, or water or petroleum in the interstitial space of secondarily contained systems), unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced.

(iii) Except for inventory monitoring and statistical inventory reconciliation under sections 613-2.3(c)(1) and (8) of this Part, respectively, monitoring results, including alarms, from a leak detection method required under sections 613-2.3(a) and (b) of this Part indicate that a leak may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result.

(2) If results from inventory monitoring and statistical inventory reconciliation indicate that a leak may have occurred, the facility must report the leak to the Department's Spill Hotline (518-457-7362) within 48 hours of determining the results and follow the procedures in subdivision (c) of this section unless the results can be explained by inaccurate recordkeeping, temperature variations, or other factors not related to leakage. The facility must maintain for three years any record that explains why the results from inventory monitoring and statistical inventory reconciliation do not indicate that a leak occurred.

(b) *Investigation due to off-site impacts.* A facility must follow the procedures in subdivision (c) of this section to determine if the UST system is the source of off-site impacts. These impacts include the discovery of petroleum (such as 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.

(c) *Leak investigation and confirmation steps.* Unless corrective action is initiated in accordance with Subpart 613-6 of this Part, a facility must investigate any suspected leak of

petroleum using either one of the methods described in paragraphs (1) or (2) of this subdivision or another procedure approved by the Department. The investigation must commence within 48 hours following the reporting of any suspected leak of petroleum required under subdivision (a) of this section. The investigation must be completed within seven days following the reporting of any suspected leak of petroleum required under subdivision (a) of this section.

(1) System test. Every facility must conduct tightness tests pursuant to sections 613-2.3(c)(3) and (d)(2) of this Part to determine whether a leak exists in the tank system.

(i) If the system test confirms a leak, the facility must act in accordance with subdivision (c) of this section before any repair to the UST system is undertaken.

(ii) Further investigation is not required if the test results for the tank system do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a leak.

(iii) The facility must conduct a site check as described in paragraph (2) of this subdivision if the test results for the tank system do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Every facility must measure for the presence of a release where contamination is most likely to be present at the facility. In selecting sample types, sample locations, and measurement methods, the facility must consider the nature of the type of petroleum, the type of initial alarm or cause for suspicion, the type of backfill, the depth of groundwater, and other factors appropriate for identifying the presence and source of the release.

(i) If the test results for the excavation zone or the UST system location indicate that a release has occurred, the facility must begin corrective action in accordance with Subpart 613-6 of this Part;

(ii) If the test results for the excavation zone or the UST system location do not indicate that a release has occurred, further investigation is not required.

(d) *Response to spills and overfills.*

(1) A facility must report every spill to the Department's Spill Hotline (518-457-7362) within two hours, contain the spill, and begin corrective action in accordance with the requirements of Subpart 613-6 of this Part except if the spill meets the following conditions:

(i) It 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 land or; and

(iv) It is cleaned up in accordance with the requirements of Subpart 613-6 of this Part within two hours of discovery.

(2) A facility must immediately discontinue operation of any leaking UST system and take the UST system temporarily out of service or close the UST system pursuant to provisions of sections 613-2.6(a) or (b) of this Part, respectively.

#### 613-2.5 Operator Training

(a) *General requirements for all UST systems.* Not later than one year after the effective date of this Part, every facility must ensure that it has designated Class A, Class B, and Class C operators who meet the requirements of this Subpart.

(b) *Designation of operators.* Facilities must designate:

(1) at least one Class A and one Class B operator for each UST or group of USTs at a facility (the same individual may be designated as both); and

(2) each individual who meets the definition of Class C operator at the UST facility as a Class C operator.

(c) *Requirements for operator testing.* Every facility must ensure Class A, Class B, and Class C operators meet the requirements of this section. Any individual designated for more than one operator class must successfully pass the required examination for each operator class in which the individual is designated.

(1) Class A operators. Each designated Class A operator must pass an examination 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) Temporary and permanent closure;
- (ix) Recordkeeping;
- (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. Each designated Class B operator must pass an examination 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) Recordkeeping;
- (viii) Environmental and regulatory consequences of releases; and
- (ix) Training requirements for Class C operators.

(3) Class C operators. Each designated Class C operator must be trained by a Class A or Class B operator to take appropriate actions in response to emergencies and alarms caused by spills or releases from the UST system.

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

(1) Class A and Class B operators must meet requirements in subdivision (c) of this section within 30 days of assuming duties.

(2) Class C operators must be trained before assuming duties of a Class C operator.

(e) *Retesting.* Class A and Class B operators of UST systems determined by the Department to be significantly out of compliance must be retested in accordance with the requirements of subdivision (c) of this section. At a minimum, the testing will cover the area(s)

determined to be out of compliance. Class A and Class B operators must be retested no later than 30 days from the date the Department determines the facility is out of compliance.

(f) *Documentation.* Every facility must maintain a list of designated Class A, Class B, and Class C operators and maintain records verifying that training and retraining, as applicable, have been completed, as follows:

(1) The list must:

(i) Identify all Class A, Class B, and Class C operators at the facility over the last three years; and

(ii) Include name of operator, class of operator, date that operator assumed duties, date the operator initially completed testing or training, and date of any retesting or retraining.

(2) Records verifying completion of testing, training or retesting must be a paper or electronic record for Class A, Class B, and Class C operators. The records, at a minimum, must identify name of operator and date tested or trained. Owners and operators must maintain these records for as long as Class A, Class B, and Class C operators are designated. Records of the examination or training must, at a minimum, be signed by the examiner or trainer and list the printed name of the examiner or trainer and the name, address, and phone number of the employer of the examiner or trainer. Records of testing must include those areas in which the Class A or Class B operator has been retested.

#### 613-2.6 Out-of-Service UST Systems and Closure

(a) *Temporarily out-of-service.*

(1) When a UST system is temporarily out-of-service, the facility must continue operation and maintenance of corrosion protection in accordance with section 613-2.2(b), and any leak detection in accordance with section 613-2.3. Subpart 613-6 of this Part must be complied with if a release is confirmed. However, leak detection is not required as long as the UST system is empty. The UST system is considered empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue remain in the system.

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

(i) Leave vent lines open and functioning; and

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

(3) When a UST system is temporarily out-of-service for more than 12 months, the facility must permanently close the UST system if it does not meet either the equipment standards for Category 2 and 3 UST systems in section 613-2.1(b) of this Part or the equipment standards for Category 1 UST systems in section 613-2.1(c) of this Part, except that the spill and overfill prevention equipment requirements do not have to be met. Facilities must permanently close the substandard UST systems at the end of this 12-month period in accordance with subdivisions (b) through (e) of this section, unless the Department provides an extension of the 12-month temporarily out-of-service period. Facilities must complete a site assessment in accordance with subdivision (c) of this section before such an extension can be applied for.

(b) *Permanent closure and changes in service.*

(1) At least 30 days before beginning either permanent closure or a change in service, a facility must notify the Department of its intent to permanently close or make the change in service, unless such action is in response to corrective action. The required assessment of the excavation zone under subdivision (c) of this section must be performed after notifying the Department but before completion of the permanent closure or a change in service.

(2) To permanently close a UST system:

(i) The facility must empty and clean it by removing all liquids and accumulated sludge. Every tank that is part of tank system that is taken out of service permanently must also be either removed from the ground or filled with an inert solid material (such as sand or concrete slurry). If an inert solid material is used, all voids within the tank must be filled. All connecting and fill lines must be disconnected and removed or securely capped or plugged. Manways must be securely fastened in place.

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

(3) Continued use of a UST system to store a substance other than petroleum is considered a change in service. Before a change in service, the facility must empty and clean the tank by removing all liquid and accumulated sludge and conduct a site assessment in accordance with subdivision (c) of this section. One of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references) must be adhered to in order to comply with this subdivision:

- (i) API RP 1604, March 1996;
- (ii) API Standard 2015, August 2001;
- (iii) API RP 2016, August 2001;
- (iv) API RP 1631, June 2001; or
- (v) NFPA 326, 2010 edition.

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

(1) Before permanent closure or a change in service is completed, the facility must measure for the presence of a release where contamination is most likely to be present at the UST system location. In selecting sample types, sample locations, and measurement methods, the facility must consider the method of closure, the petroleum stored, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence of a release. The requirements of this subdivision are satisfied if one of the external release detection methods allowed in sections 613-2.3(c)(5) and (6) is operating in accordance with the requirements in section 613-2.3(c) at the time of closure, and indicates no release has occurred.

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

(d) For any UST system that has been out-of-service since December 27, 1986 and was not properly permanently closed pursuant to Department regulations governing tank system closure, the facility owner must assess the excavation zone and permanently close the UST system in accordance with this section if the Department determines there is a potential for a release of petroleum from the UST system.

(e) *Records for permanent closure or change in service.* The facility must maintain for three years records that are capable of demonstrating compliance with closure requirements under this Subpart. In addition, the facility must transmit the records to the Department no later than 30 days after permanent closure or change in service.

613-2.7 Financial Responsibility for Third-Party Bodily Injury

(a) *Applicability.*

(1) This section applies to owners and operators of UST systems subject to this Subpart except systems that are owned or operated by State or federal government entities whose debts and liabilities are the debts and liabilities of the State or the United States, respectively.

(2) If the owner and operator of a UST system are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in the event of noncompliance.

(b) *Definitions.* When used in this section, the following terms have the meanings given below:

(1) "Accidental release" means any sudden or nonsudden release of petroleum arising from operating a UST system that results in a need for compensation for bodily injury

neither expected nor intended by the tank owner or operator.

(2) “Bodily injury” has the meaning given to this term by New York 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.

(3) “Chief Financial Officer,” in the case of local government owners and operators, means the individual with the overall authority and responsibility for the collection, disbursement, and use of funds by the local government.

(4) “Controlling interest” means direct ownership of at least 50 percent of the voting stock of another entity.

(5) “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:

- (i) a 10-K report submitted to the SEC;
- (ii) an annual report of tangible net worth submitted to Dun and Bradstreet; or
- (iii) annual reports submitted to the Energy Information Administration or the Rural Utilities Service.

“Financial reporting year” may thus comprise a fiscal or a calendar year period.

(6) “Legal defense cost” means any expense that an owner or operator or provider of financial responsibility incurs in defending against claims or actions brought, by or on behalf of a third party for bodily injury caused by an accidental release; or by any person to enforce the terms of a financial responsibility mechanism.

(7) “Local government” means a county, city, town, village, school district, fire district or other special district.

(8) “Occurrence” means an accident, including continuous or repeated exposure to conditions, which results in a release from a UST system.

Note to paragraph (8): 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.”

(9) “Owner or operator” means the owner or operator of a tank system subject to Subpart 613-2 of this Part. When the owner and operator are separate parties, the term refers to the party that is obtaining or has obtained financial responsibility.

(10) “Petroleum marketing facilities” means 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.

(11) “Petroleum marketing firms” means firms owning petroleum marketing facilities. Firms owning other types of facilities with UST systems as well as petroleum marketing facilities are considered to be petroleum marketing firms.

(12) “Provider of financial responsibility” means an entity that provides financial responsibility to an owner or operator of a UST system through one of the mechanisms listed in subdivisions (e) through (l) of this section, including a guarantor, insurer, risk retention group, surety, or issuer of a letter of credit.

(13) “Substantial business relationship” means the extent of a business relationship necessary under New York 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 owner or operator.

(14) “Substantial governmental relationship” means the extent of a governmental relationship necessary under New York 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 system 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.

(15) “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.

(16) “Termination” as used in paragraph (g)(2) of this section 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.

(c) *Amount and scope of required financial responsibility.*

(1) Owners or operators of UST systems must demonstrate financial responsibility for compensating third parties for bodily injury caused by accidental releases arising from the operation of UST systems in at least the following per-occurrence amounts:

(i) For owners or operators of UST systems 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.

(ii) For all other owners or operators of UST systems: \$500,000.

(2) Owners or operators of UST systems must demonstrate financial responsibility for compensating third parties for bodily injury caused by accidental releases arising from the operation of UST systems in at least the following annual aggregate amounts:

(i) For owners or operators of 1 to 100 UST systems: \$1 million; and

(ii) For owners or operators of 101 or more UST systems: \$2 million.

(3) Except as provided in paragraph (4) of this subdivision, if the owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for compensating third parties for bodily injury caused by sudden accidental releases and bodily injury caused by nonsudden accidental releases, the amount of assurance provided by each mechanism or combination of mechanisms must be in the full amount specified in paragraphs (1) and (2) of this subdivision.

(4) If an owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different UST systems, the annual aggregate required is based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

(5) Owners or operators must review the amount of aggregate assurance provided whenever additional UST systems are acquired or installed. If the number of UST systems for which assurance must be provided exceeds 100, the 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 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.

(6) The amounts of assurance required under this subdivision exclude legal defense costs.

(7) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.

(d) *Allowable mechanisms and combinations of mechanisms.*

(1) Subject to the limitations of paragraphs (2) and (3) of this subdivision,

(i) An owner or operator, including a local government owner or operator, may use any one or a combination of the mechanisms listed in subdivisions (e) through (h) of this section to demonstrate financial responsibility under this section for one or more UST

systems, and

(ii) A local government owner or operator may use any one or a combination of the mechanisms listed in subdivisions (i) through (l) of this section to demonstrate financial responsibility under this section for one or more UST systems.

(2) An owner or operator may use a guarantee under subdivision (f) of this section to establish financial responsibility only if the Attorney(s) General of New York State has submitted a written statement to the Department that a guarantee executed as described in this subdivision is a legally valid and enforceable obligation in New York State.

(3) An 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 owner or operator are not consolidated with the financial statements of the guarantor.

(e) *Financial test of self-insurance.*

(1) An owner or operator, and/or guarantor, may satisfy the requirements of subdivision (c) of this section by passing a financial test as specified in this subdivision. To pass the financial test of self-insurance, the owner or operator, and/or guarantor must meet the criteria of paragraph (2) or (3) of this subdivision based on year-end financial statements for the latest completed fiscal year.

(2) (i) The owner or operator, and/or guarantor, must have a tangible net worth of at least ten times:

(a) The total of the applicable aggregate amount required by subdivision (c) of this section, based on the number of UST systems for which a financial test is used to demonstrate financial responsibility to the Department; and

(b) The amount of liability coverage for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 264.101, 264.143, 264.145, 265.143, 265.145, 264.147, and 265.147 or to a state implementing agency under a state program authorized by EPA under 40 CFR part 271; and

(c) The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 144.63 or to a state implementing agency under a state program authorized by EPA under 40 CFR part 145.

(ii) The owner or operator, and/or guarantor, must have a tangible net worth of at least \$10 million.

(iii) The owner or operator, and/or guarantor, must have a letter signed by the chief financial officer worded as specified in paragraph (4) of this subdivision.

(iv) The owner or operator, and/or guarantor, must either:

(a) File financial statements annually with the U.S. Securities and Exchange Commission, the Energy Information Administration, or the Rural Utilities Service; or

(b) Report annually the firm's tangible net worth to Dun and Bradstreet, and Dun and Bradstreet must have assigned the firm a financial strength rating of 4A or 5A.

(v) The firm's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(3) (i) The owner or operator, and/or guarantor must meet the financial test requirements of 40 CFR 264.147(f)(1), substituting the appropriate amounts specified in paragraph (c)(2) of this section for the "amount of liability coverage" each time specified in that subdivision.

(ii) The fiscal year-end financial statements of the owner or operator, and/or guarantor, must be examined by an independent certified public accountant and be accompanied by the accountant's report of the examination.

(iii) The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.

(iv) The owner or operator, and/or guarantor, must have a letter signed by the chief financial officer, worded as specified in paragraph (4) of this subdivision.

(v) If the financial statements of the owner or operator, and/or guarantor, are not submitted annually to the U.S. Securities and Exchange Commission, the Energy Information Administration or the Rural Utilities Service, the owner or operator, and/or guarantor, must obtain a special report by an independent certified public accountant stating that:

(a) He has compared the data that the letter from the chief financial officer specifies as having been derived from the latest year-end financial statements of the owner or operator, and/or guarantor, with the amounts in such financial statements; and

(b) In connection with that comparison, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) To demonstrate that it meets the financial test under paragraph (2) or (3) of this subdivision, the chief financial officer of the owner or operator, or guarantor, must sign, within 120 days of 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 are to be replaced by 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 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 compensating third parties for bodily injury caused by [insert: “sudden accidental releases” or “nonsudden 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 system(s). Underground storage systems at the following facilities are assured by this financial test by this [insert: “owner or operator,” and/or “guarantor”]: [List for each facility: the name and address of the facility where tank systems 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 registration identification number recorded on the relevant registration certificate(s).]

A [insert: “financial test,” and/or “guarantee”] is also used by this [insert: “owner or operator,” or “guarantor”] to demonstrate evidence of financial responsibility in the following amounts under other EPA regulations or state programs authorized by EPA under 40 CFR parts 271 and 145:

Regulations	Amount
Closure (§§ 264.143 and 265.143).....	\$ _____
Post-Closure Care (§§ 264.145 and 265.145).....	\$ _____
Liability Coverage (§§ 264.147 and 265.147).....	\$ _____
Corrective Action (§§ 264.101(b)).....	\$ _____
Plugging and Abandonment (§ 144.63).....	\$ _____
Closure.....	\$ _____
Post-Closure Care.....	\$ _____
Liability Coverage.....	\$ _____
Corrective Action.....	\$ _____
Plugging and Abandonment.....	\$ _____
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.

[Fill in the information for Alternative I if the criteria of paragraph (2) of this subdivision are being used to demonstrate compliance with the financial test requirements. Fill in the information for Alternative II if the criteria of paragraph (3) of this subdivision are being used to demonstrate compliance with the financial test requirements.]

Alternative I

- |   |          |
|---|----------|
| 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]   | \$ _____ |
|   | Yes No   |
| 7. Is line 6 at least \$10 million?   | ___ ___  |
| 8. Is line 6 at least 10 times line 3?  | ___ ___  |
| 9. Have financial statements for the latest fiscal year been filed with the Securities and Exchange Commission?   | ___ ___  |
| 10. Have financial statements for the latest fiscal year been filed with the Energy Information Administration?   | ___ ___  |
| 11. Have financial statements for the latest fiscal year been filed with the Rural Utilities Service?   | ___ ___  |
| 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.] | ___ ___  |

Alternative II

- |   |          |
|---|----------|
| 1. Amount of annual UST aggregate coverage being assured by a 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. Total assets in the U.S. [required only if less than 90 percent of assets are located in the U.S.] \$\_\_\_\_\_
8. Is line 6 at least \$10 million? Yes No  
\_\_\_\_\_
9. Is line 6 at least 6 times line 3? \_\_\_\_\_
10. Are at least 90 percent of assets located in the U.S.? [If "No," complete line 11.] \_\_\_\_\_
11. Is line 7 at least 6 times line 3? \_\_\_\_\_  
[Fill in either lines 12-15 or lines 16-18:]
12. Current assets \$\_\_\_\_\_
13. Current liabilities \$\_\_\_\_\_
14. Net working capital [subtract line 13 from line 12] \$\_\_\_\_\_
15. Is line 14 at least 6 times line 3? Yes No  
\_\_\_\_\_
16. Current bond rating of most recent bond issue \_\_\_\_\_
17. Name of rating service \_\_\_\_\_
18. Date of maturity of bond \_\_\_\_\_
19. Have financial statements for the latest fiscal year been filed with the SEC, the Energy Information Administration, or the Rural Utilities Service? \_\_\_\_\_

[If "No," please attach a report from an independent certified public accountant certifying that there are no material differences between the data as reported in lines 4-18 above and the financial statements for the latest fiscal year.]

[For both Alternative I and Alternative II complete the certification with this statement.]

I hereby certify that the wording of this letter is identical to the wording specified in 6 NYCRR § 613-2.7(e)(4) as such regulations were constituted on the date shown immediately below.

[Signature]  
[Name]  
[Title]  
[Date]

(5) If an owner or operator using the test to provide financial responsibility finds that he or she no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator must obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.

(6) The Department may require reports of financial condition at any time from the owner or operator, and/or guarantor. If the Department finds, on the basis of such reports or other information, that the owner or operator, and/or guarantor, no longer meets the financial test requirements of paragraph (2) or (3) of this subdivision, as initially recorded in the submissions made pursuant to paragraph (4) of this subdivision, the owner or operator must obtain alternate coverage within 30 days after notification of such a finding.

(7) If the owner or operator fails to obtain alternate assurance within 150 days of finding that he or she no longer meets the requirements of the financial test based on the year-end financial statements, or within 30 days of notification by the Department that he or she no longer meets the requirements of the financial test, the owner or operator must notify the Department of such failure within 10 days.

(f) *Guarantee.*

(1) An owner or operator may satisfy the requirements of subdivision (c) of this section by obtaining a guarantee that conforms to the requirements of this subdivision. The guarantor must be:

(i) A firm that

(a) possesses a controlling interest in the owner or operator;

(b) possesses a controlling interest in a firm described under clause (d)(1)(i)(a) of this subparagraph; or,

(c) is controlled through stock ownership by a common parent firm that possesses a controlling interest in the owner or operator; or,

(ii) A firm engaged in a substantial business relationship with the owner or operator and is issuing the guarantee as an act incident to that business relationship.

(2) Within 120 days of the close of each financial reporting year the guarantor must demonstrate that it meets the financial test criteria of subdivision (e) of this section based on year-end financial statements for the latest completed financial reporting year by completing the letter from the chief financial officer described in paragraph (e)(4) of this section and must deliver the letter to the owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within 120 days of the end of that financial reporting year the guarantor must send by certified mail, before cancellation or nonrenewal of the guarantee, notice to the owner or operator. If the Department notifies the guarantor that he no longer meets the requirements of the financial test of paragraph (e)(2) or (e)(3) and (e)(4) of this section, the guarantor must notify the owner or operator within 10 days of receiving such notification from the Department. In both cases, the guarantee will terminate no less than 120 days after the date the owner or operator receives the notification, as evidenced by the return receipt. The owner or operator must obtain alternative coverage as specified in paragraph (s)(5) of this section.

(3) The guarantee must be worded as follows, except that instructions in brackets are to 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 New York State Department of Environmental Conservation (“the Department”) and to any and all third parties, and obligees, on behalf of [owner or operator] of [business address].

#### Recitals.

(1) Guarantor meets or exceeds the financial test criteria of 6 NYCRR § 613-2.7(e)(2) or (e)(3) and (e)(4) and agrees to comply with the requirements for guarantors as specified in 6 NYCRR § 613-2.7(f)(2).

(2) [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 registration identification number recorded on the relevant registration certificate(s), and the name and address of the facility.] This guarantee satisfies 6 NYCRR Part 613 requirements for assuring funding for compensating third parties for bodily injury caused by [insert: either “sudden accidental releases” or “nonsudden 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 owner or operator); “On behalf of our affiliate” (if guarantor is a related firm of the 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 owner or operator)] [owner or operator], guarantor guarantees to the Department and to any and all third parties that:

In the event that [owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and 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 Department, must fund a standby trust fund in accordance with the provisions of 6 NYCRR § 613-2.7(q), in an amount not to exceed the coverage limits specified above.

If [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury to third parties caused by [“sudden” and/or “nonsudden”] 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 Department, must fund a standby trust in accordance with the provisions of 6 NYCRR § 613-2.7(q) 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 § 613-2.7(e)(2) or (e)(3) and (e)(4), guarantor must send within 120 days of such failure, by certified mail, notice to [owner or operator]. The guarantee will terminate 120 days from the date of receipt of the notice by [owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within 10 days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to 6 NYCRR Part 613.

(7) Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR § 613-2.7 for the above-identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [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 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 owner or operator] arising from, and in the course of, employment by [insert owner or operator];

(c) Bodily injury arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Bodily 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 § 613-2.7(c).

(9) Guarantor expressly waives notice of acceptance of this guarantee by the Department, by any or all third parties, or by [owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR § 613-2.7(f)(3) 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:

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(4) An owner or operator who uses a guarantee to satisfy the requirements of subdivision (c) of this section 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 Department under subdivision (q) of this section. This standby trust fund must meet the requirements specified in subdivision (h) of this section.

(g) *Insurance and risk retention group coverage.*

(1) An owner or operator may satisfy the requirements of subdivision (c) of this section by obtaining liability insurance that conforms to the requirements of this subdivision 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.

(2) Each insurance policy must be amended by an endorsement worded as specified in subparagraph (g)(2)(i) of this paragraph, or evidenced by a certificate of insurance worded as specified in subparagraph (g)(2)(ii) of this paragraph, except that instructions in brackets must be replaced with the relevant information and the brackets deleted:

(i) Endorsement

Name: [name of each covered location]

Address: [address of each covered location]

Policy Number: \_\_\_\_\_

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: \_\_\_\_\_

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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 registration identification number recorded on the relevant registration certificate(s), and the name and address of the facility.] for compensating third parties for bodily injury [insert: either “sudden accidental releases” or “nonsudden 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 does 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 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 § 613-2.7(e) through (g).

c. Whenever requested by the New York State Department of Environmental Conservation (“the Department”), the [“Insurer” or “Group”] agrees to furnish to the Department 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 non-payment 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 10 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 § 613-2.7(g)(2)(i) 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]

(ii) 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 registration identification

number recorded on the relevant registration certificate(s), and the name and address of the facility.] for compensating third parties for bodily injury caused by [insert: either “sudden accidental releases” or “nonsudden 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 does 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 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 § 613-2.7(e) through (g).

c. Whenever requested by the New York State Department of Environmental Conservation (“the Department”), the [“Insurer” or “Group”] agrees to furnish to the Department 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 non-payment 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 10 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 § 613-2.7(g)(2)(ii) 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 New York”].  
[Signature of authorized representative of Insurer]

[Type name]

[Title], Authorized Representative of [name of Insurer or Risk Retention]

Group]  
[Address of Representative]

(3) 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.

(h) *Standby trust fund.*

(1) An owner or operator using the guarantee mechanism authorized by subdivision (f) of this section 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.

(2) (i) The standby trust agreement, or trust agreement, must be worded as follows, except that instructions in brackets are to 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 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 New York State Department of Environmental Conservation, has established certain regulations applicable to the Grantor, requiring that an owner or operator of an underground storage tank must provide assurance that funds will be available when needed for third-party compensation for bodily injury caused by sudden and nonsudden 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 responsibility 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 Responsibility Mechanism

This Agreement pertains to the [identify the financial responsibility 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 the New York State Department of Environmental Conservation (“the Department”). 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 will not consist of any property.] Payments made by the provider of financial responsibility pursuant to 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 will be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee will not be responsible nor will it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor as provider of financial responsibility, any payments necessary to discharge any liability of the Grantor established by the Department.

## Section 4. Payment for Third-Party Bodily Injury Claims

The Trustee must make payments from the Fund as the Department directs, in writing, to provide for the payment of the costs of compensating third parties for bodily injury caused by[insert: either “sudden accidental releases” or “nonsudden accidental Releases” or “accidental releases”] arising from operating the tanks covered by the financial responsibility mechanism identified in this Agreement.

The Fund may not be drawn upon to cover any of the following:

(a) Any obligation of [insert 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 owner or operator] arising from, and in the course of employment by [insert owner or operator];

(c) Bodily injury arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Bodily injury 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 § 613-2.7(c).

The Trustee must reimburse the Grantor, or other persons as specified by the Department, from the Fund for third-party bodily injury claims in such amounts as the Department directs in writing. In addition, the Trustee must refund to the Grantor such amounts as the Department

specifies in writing. Upon refund, such funds will no longer constitute part of the Fund as defined herein.

#### Section 5. Payments Comprising the Fund

Payments made to the Trustee for the Fund must consist of cash and securities acceptable to the Trustee.

#### Section 6. Trustee Management

The Trustee must 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 must 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), must 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 will 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 must 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 must 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 must 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 will be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

#### Section 11. Trustee Compensation

The Trustee will 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 will not be effective until the Grantor has appointed a successor trustee and this

successor accepts the appointment. The successor trustee will have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee must 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 must specify the date on which it assumes administration of the trust in writing sent to the Grantor and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section must be paid as provided in Section 9.

### Section 13. Instructions to the Trustee

All orders, requests, and instructions by the Grantor to the Trustee must 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 will be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee must be in writing, signed by the Department, and the Trustee must act and will be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee will 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 Department hereunder has occurred. The Trustee will have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Department, 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 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 will be irrevocable and will continue until terminated at the written direction of the Grantor and the Trustee, or by the Trustee and the Department, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, must be delivered to the Grantor.

### Section 16. Immunity and Indemnification

The Trustee will 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 Department issued in accordance with this Agreement. The Trustee will 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 will be administered, construed, and enforced according to the laws of New York 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 will 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 § 613-2.7(h)(2)(i) 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]

(ii) The standby trust agreement, or trust agreement must be accompanied by a formal certification of acknowledgement similar to the following. State requirements may differ on the proper content of this acknowledgment.

State of \_\_\_\_\_

County of \_\_\_\_\_

On this [date], before me personally came [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 Directors of said corporation; and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

[Name of Notary Public]

(3) The Department will instruct the trustee to refund the balance of the standby trust fund to the provider of financial responsibility if the Department determines that no additional third-party bodily injury claims will occur as a result of a release covered by the financial responsibility mechanism for which the standby trust fund was established.

(4) An owner or operator may establish one trust fund as the depository mechanism for all funds assured in compliance with this rule.

(i) *Local government bond rating test.*

(1) A general purpose local government owner or operator and/or local government serving as a guarantor may satisfy the requirements of subdivision (c) of this section 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.

(2) A local government 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 subdivision (c) of this section 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.

(3) The local government 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.

(4) To demonstrate that it meets the local government bond rating test, the chief financial officer of a general purpose local government owner or operator and/or guarantor must sign a letter worded exactly as follows, except that the instructions in brackets are to be replaced by 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 owner or operator, or guarantor]. This letter is in support of the use of the bond rating test to demonstrate financial responsibility for compensating third parties for bodily injury caused by [insert:

“sudden accidental releases” or “nonsudden 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 owner or operator, or guarantor] to demonstrate financial responsibility are as follows: [complete table]

Issue date	Maturity date	Outstanding amount	Bond rating	Rating agency
[Moody’s or Standard & Poor’s]				

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 § 613-2.7(i)(4) as such regulations were constituted on the date shown immediately below.

[Date] \_\_\_\_\_  
 [Signature] \_\_\_\_\_  
 [Name] \_\_\_\_\_  
 [Title] \_\_\_\_\_

(5) To demonstrate that it meets the local government bond rating test, the chief financial officer of local government 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 are to be replaced by 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 owner or operator, or guarantor]. This letter is in support of the use of the bond rating test to demonstrate financial responsibility for compensating third parties for bodily injury caused by [insert: “sudden accidental releases” or “nonsudden 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 owner or operator, or guarantor] to demonstrate financial responsibility are as follows: [complete table]

Issue date	Maturity date	Outstanding amount	Bond rating	Rating agency
[Moody's or Standard & Poor's]				

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 § 613-2.7(i)(5) as such regulations were constituted on the date shown immediately below.

[Date] \_\_\_\_\_  
 [Signature] \_\_\_\_\_  
 [Name] \_\_\_\_\_  
 [Title] \_\_\_\_\_

(6) The Department may require reports of financial condition at any time from the local government owner or operator, and/or local government guarantor. If the Department finds, on the basis of such reports or other information, that the local government owner or operator, and/or guarantor, no longer meets the local government bond rating test requirements of subdivision (i) of this section, the local government owner or operator must obtain alternative coverage within 30 days after notification of such a finding.

(7) If a local government owner or operator using the bond rating test to provide financial responsibility finds that it no longer meets the bond rating test requirements, the local government owner or operator must obtain alternative coverage within 150 days of the change in status.

(8) If the local government owner or operator fails to obtain alternate assurance within 150 days of finding that it no longer meets the requirements of the bond rating test or within 30 days of notification by the Department that it no longer meets the requirements

of the bond rating test, the owner or operator must notify the Department of such failure within 10 days.

(j) *Local government financial test.*

(1) A local government owner or operator may satisfy the requirements of subdivision (c) of this section by passing the financial test specified in this subdivision. To be eligible to use the financial test, the local government 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 owner or operator must meet the criteria of subparagraphs (2)(ii) and (2)(iii) of this subdivision based on year-end financial statements for the latest completed fiscal year.

(2) (i) The local government owner or operator must have the following information available, as shown in the year-end financial statements for the latest completed fiscal year:

(a) Total revenues: Consists of the sum of general fund operating and non-operating 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 will 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.

(b) Total expenditures: Consists of the sum of general fund operating and non-operating 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 will exclude all transfers between funds under the direct control of the local government using the financial test (interfund transfers).

(c) Local revenues: Consists of total revenues (as defined in clause (i)(a) of this paragraph) minus the sum of all transfers from other governmental entities, including all monies received from Federal, state, or local government sources.

(d) 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.

(e) 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 will exclude agency funds, private trust funds, accounts receivable, value of real property, and other non-security assets.

(f) Population consists of the number of people in the area served by the local government.

(ii) 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.

(iii) The local government owner or operator must have a letter signed by the chief financial officer worded as specified in paragraph (3) of this subdivision.

(3) To demonstrate that it meets the financial test under paragraph (2) of this subdivision, the chief financial officer of the local government owner or operator, must sign, within 120 days of 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 are to be replaced by 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 owner or operator]. This letter is in support of the use of the local government financial test to demonstrate financial responsibility for compensating third parties for bodily injury caused by [insert: "sudden accidental releases" or "nonsudden 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 registration identification number recorded on the relevant registration certificate(s).]

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 § 613-2.7(j)(3) as such regulations were constituted on the date shown immediately below.

[Date]

[Signature]

[Name]  
[Title]

(4) If a local government owner or operator using the test to provide financial responsibility finds that it no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator must obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.

(5) The Department may require reports of financial condition at any time from the local government owner or operator. If the Department finds, on the basis of such reports or other information, that the local government owner or operator no longer meets the financial test requirements of 6 NYCRR § 613-2.7(j)(2) and (3), the owner or operator must obtain alternate coverage within 30 days after notification of such a finding.

(6) If the local government owner or operator fails to obtain alternate assurance within 150 days of finding that it no longer meets the requirements of the financial test based on the year-end financial statements or within 30 days of notification by the Department that it no longer meets the requirements of the financial test, the owner or operator must notify the Department of such failure within 10 days.

(k) *Local government guarantee.*

(1) A local government owner or operator may satisfy the requirements of subdivision (c) of this section by obtaining a guarantee that conforms to the requirements of this subdivision. The guarantor must be a local government having a “substantial governmental relationship” with the owner and operator and issuing the guarantee as an act incident to that relationship. A local government acting as the guarantor must:

(i) demonstrate that it meets the bond rating test requirement of subdivision (i) of this section and deliver a copy of the chief financial officer’s letter as contained in paragraphs (i)(4) and (i)(5) of this section to the local government owner or operator; or

(ii) demonstrate that it meets the worksheet test requirements of subdivision (j) of this section and deliver a copy of the chief financial officer’s letter as contained in paragraph (j)(3) of this section to the local government owner or operator; or

(iii) demonstrate that it meets the local government fund requirements of paragraphs (l)(1), (l)(2), or (l)(3) of this section and deliver a copy of the chief financial officer’s letter as contained in subdivision (l) of this section to the local government owner or operator.

(2) If the local government guarantor is unable to demonstrate financial responsibility under any of subdivisions (i), (j), or paragraphs (l)(1), (l)(2), or (l)(3) of this section, at the end of the financial reporting year, the guarantor must send by certified mail, before cancellation or non-renewal of the guarantee, notice to the owner or operator. The guarantee will terminate no less than 120 days after the date the owner or operator receives the

notification, as evidenced by the return receipt. The owner or operator must obtain alternative coverage as specified in paragraph (s)(5) of this section.

(3) The guarantee agreement must be worded as specified in paragraph (4) or (5) of this subdivision, depending on which of the following alternative guarantee arrangements is selected:

(i) If, in the default or incapacity of the owner or operator, the guarantor guarantees to fund a standby trust as directed by the Department, the guarantee must be worded as specified in paragraph (4) of this subdivision.

(ii) If, in the default or incapacity of the owner or operator, the guarantor guarantees to make payments as directed by the Department or compensating third parties for bodily injury, the guarantee must be worded as specified in paragraph (5) of this subdivision.

(4) The local government guarantee with standby trust must be worded exactly as follows, except that instructions in brackets are to be replaced with 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 New York State, herein referred to as guarantor, to the New York State Department of Environmental Conservation (“the Department”) and to any and all third parties, and obliges, on behalf of [local government owner or operator].

#### Recitals

(1) Guarantor meets or exceeds [select one: the local government bond rating test requirements of 6 NYCRR § 613-2.7(i), the local government financial test requirements of 6 NYCRR § 613-2.7(j), or the local government fund under 6 NYCRR § 613-2.7(l)(1), (l)(2), or (l)(3)].

(2) [Local government 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 registration identification number recorded on the relevant registration certificate(s), and the name and address of the facility.] This guarantee satisfies 6 NYCRR § 613-2.7 requirements for assuring funding for compensating third parties for bodily injury caused by [insert: either “sudden accidental Releases” or “nonsudden 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 owner or operator], guarantor guarantees to the Department and to any and all third parties that:

In the event that [local government owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and 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 Department must fund a standby trust fund in accordance with the provisions of 6 NYCRR § 613-2.7(q), in an amount not to exceed the coverage limits specified above.

If [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury to third parties caused by [“sudden” and/or “nonsudden”] 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, the guarantor, upon written instructions from the Department, must fund a standby trust in accordance with the provisions of 6 NYCRR § 613-2.7(q) 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 must send within 120 days of such failure, by certified mail, notice to [local government owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within 10 days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to 6 NYCRR Part 613.

(7) Guarantor agrees to remain bound under this guarantee for so long as [local government owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR § 613-2.7 for the above identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [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 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 owner or operator] arising from, and in the course of, employment by [insert: local government owner or operator];

(c) Bodily injury arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Bodily injury 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 § 613-2.7(c).

(9) Guarantor expressly waives notice of acceptance of this guarantee by the Department, by any or all third parties, or by [local government owner or operator].

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR § 613-2.7(k)(4) 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:

(5) The local government guarantee without standby trust must be worded exactly as follows, except that instructions in brackets are to be replaced with 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 New York State, herein referred to as guarantor, to the New York State Department of Environmental Conservation (“the Department”) and to any and all third parties, and obliges, on behalf of [local government owner or operator].

#### Recitals

(1) Guarantor meets or exceeds [select one: the local government bond rating test requirements of 6 NYCRR § 613-2.7(i), the local government financial test requirements of 6 NYCRR § 613-2.7(j), the local government fund under 6 NYCRR § 613-2.7(l)(1), (l)(2), or (l)(3)].

(2) [Local government 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 registration identification number recorded on the relevant registration certificate(s), and the name and address of the facility.] This guarantee satisfies 6 NYCRR § 613-2.7 requirements for assuring funding for compensating third parties for bodily injury caused by [insert: either “sudden accidental releases” or “nonsudden 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 owner or operator], guarantor guarantees to the Department and to any and all third parties and obliges that:

In the event that [local government owner or operator] fails to provide alternative coverage within 60 days after receipt of a notice of cancellation of this guarantee and 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 Department must make funds available to compensate third parties for bodily injury in an amount not to exceed the coverage limits specified above.

If [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury to third parties caused by [“sudden” and/or “nonsudden”] 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, the guarantor, upon written instructions from the Department, must make funds available to compensate third parties for bodily injury 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 must send within 120 days of such failure, by certified mail, notice to [local government owner or operator], as evidenced by the return receipt.

(5) Guarantor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code naming guarantor as debtor, within 10 days after commencement of the proceeding.

(6) Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to 6 NYCRR Part 613.

(7) Guarantor agrees to remain bound under this guarantee for so long as [local government owner or operator] must comply with the applicable financial responsibility requirements of 6 NYCRR § 613-2.7 for the above identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [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 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 owner or operator] arising from, and in the course of, employment by [insert: local government owner or operator];

(c) Bodily injury arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;

(d) Bodily 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 § 613-2.7(c).

(9) Guarantor expressly waives notice of acceptance of this guarantee by [the implementing agency], by any or all third parties, or by [local government owner or operator],

I hereby certify that the wording of this guarantee is identical to the wording specified in 6 NYCRR § 613-2.7(k)(5) 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:

(1) *Local government fund.* A local government owner or operator may satisfy the requirements of subdivision (c) of this section by establishing a dedicated fund account that conforms to the requirements of this subdivision. Except as specified in paragraph (2) of this subdivision, 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:

(1) The fund is dedicated by local government statute, charter, ordinance, or order to pay for compensating third parties for bodily injury caused by accidental releases arising from the operation of petroleum underground storage tanks and is funded for the full amount of coverage required under subdivision (c) of this section, or funded for part of the required amount of coverage and used in combination with other mechanism(s) that provide the remaining coverage; or

(2) The fund is dedicated by local government statute, charter, ordinance, or order as a contingency fund for general emergencies, including compensating third parties for bodily injury 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 subdivision (c) of this section, 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 subdivision (c) of this section, the amount of financial responsibility demonstrated by the fund may not exceed one-fifth the amount in the fund; or

(3) The fund is dedicated by local government statute, charter, ordinance or order to pay for compensating third parties for bodily injury caused by accidental releases arising from the operation of petroleum underground storage tanks. 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 responsibility for the owner or operator, CF is the current amount in the fund, and Y is the number of years remaining in the pay-in-period, and;

(i) The local government owner or operator has available bonding authority, 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 compensating third parties for bodily injury caused by accidental releases arising from the operation of petroleum underground storage tanks, or

(ii) The local government owner or operator has a letter signed by the appropriate state attorney general stating 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.

(4) To demonstrate that it meets the requirements of the local government fund, the chief financial officer of the local government owner or operator and/or guarantor must sign a letter worded exactly as follows, except that the instructions in brackets are to be replaced by 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 owner or operator, or guarantor]. This letter is in support of the use of the local government fund mechanism to demonstrate financial responsibility for compensating third parties for bodily injury caused by [insert: "sudden accidental releases" or "nonsudden 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 § 613-2.7(c), 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 § 613-2.7(c), 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 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 paragraph (l)(3) of this subdivision, 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 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 § 613-2.7(1)(4) as such regulations were constituted on the date shown immediately below.

[Date]

[Signature]

[Name]

[Title]

(m) *Substitution of financial responsibility mechanisms by owner or operator.*

(1) An owner or operator may substitute any alternate financial responsibility mechanisms as specified in this section, provided that at all times he maintains an effective financial responsibility mechanism or combination of mechanisms that satisfies the requirements of subdivision (c) of this section.

(2) After obtaining alternate financial responsibility as specified in this section, an owner or operator may cancel a financial responsibility mechanism by providing notice to the provider of financial responsibility.

(n) *Cancellation or nonrenewal by a provider of financial responsibility.*

(1) Except as otherwise provided, a provider of financial responsibility may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator.

(i) Termination of a local government guarantee or a guarantee may not occur until 120 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(ii) Termination of insurance or risk retention coverage, except for non-payment or misrepresentation by the insured, may not occur until 60 days after the date on which the 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 10 days after the date on which the 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 (s) of this section, the owner or operator must obtain alternate coverage as specified in this subdivision within 60 days after receipt of the notice of termination. If the owner or operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, the owner or operator must notify the Department of such failure and submit:

- (i) The name and address of the provider of financial responsibility;
- (ii) The effective date of termination; and
- (iii) The evidence of the financial responsibility mechanism subject to the termination maintained in accordance with paragraph (p)(2) of this section.

(o) *Reporting by owner or operator.*

(1) An owner or operator must submit the appropriate forms listed in paragraph (p)(2) of this section documenting current evidence of financial responsibility to the Department:

(i) Within 30 days after the owner or operator identifies a release from an underground storage tank required to be reported under section 613-2.4 or Subpart 613-6 of this Part;

(ii) If the owner or operator fails to obtain alternate coverage as required by this section, within 30 days after the owner or operator receives notice of:

(a) Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial responsibility as a debtor,

(b) Suspension or revocation of the authority of a provider of financial responsibility to issue a financial responsibility mechanism,

(c) Failure of a guarantor to meet the requirements of the financial test,

(d) Other incapacity of a provider of financial responsibility; or

(iii) As required by paragraphs (e)(8) or (n)(2) of this section.

(2) An owner or operator must certify compliance with the financial

responsibility requirements of this Part when applying for a registration certificate under section 613-1.9(e) or providing advance notification of the installation of a tank under 613-1.9(g).

(3) The Department may require an owner or operator to submit evidence of financial responsibility as described in paragraph (p)(2) of this section or other information relevant to compliance with this section at any time.

(p) *Recordkeeping.*

(1) Owners or operators must maintain evidence of all financial responsibility mechanisms used to demonstrate financial responsibility for an underground storage tank until released from the requirements of this section under subdivision (r) of this section. An 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 Department.

(2) An owner or operator must maintain the following types of evidence of financial responsibility:

(i) An owner or operator using an assurance mechanism specified in subdivisions (e) through (l) of this section must maintain a copy of the instrument worded as specified.

(ii) An owner or operator using a financial test or guarantee, or a local government financial test or a local government guarantee supported by the local government financial test must maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial reporting year. Such evidence must be on file no later than 120 days after the close of the financial reporting year.

(iii) An owner or operator using a guarantee must maintain a copy of the signed standby trust fund agreement and copies of any amendments to the agreement.

(iv) A local government owner or operator using a local government guarantee under paragraph (k)(4) of this section must maintain a copy of the signed standby trust fund agreement and copies of any amendments to the agreement.

(v) A local government owner or operator using the local government bond rating test under subdivision (i) of this section must maintain a copy of its bond rating published within the last twelve months by Moody's or Standard & Poor's.

(vi) A local government owner or operator using the local government guarantee under subdivision (k) of this section, where the guarantor's demonstration of financial responsibility relies on the bond rating test under subdivision (i) of this section must maintain a copy of the guarantor's bond rating published within the last twelve months by Moody's or Standard & Poor's.

(vii) An owner or operator using an insurance policy or risk retention group coverage must maintain a copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements.

(viii) An owner or operator using a local government fund under subdivision (l) of this section must maintain the following documents:

(a) A copy of the local government statute, charter, ordinance, or order dedicating the fund, and

(b) Year-end financial statements for the most recent completed financial reporting year showing the amount in the fund. If the fund is established under paragraph (l)(3) of this section using incremental funding backed by bonding authority, the financial statements must show the previous year's balance, the amount of funding during the year, and the closing balance in the fund.

(c) If the fund is established under paragraph (l)(3) of this section using incremental funding backed by bonding authority, the owner or operator must also maintain documentation of the required bonding authority, including either the results of a voter referendum (under subparagraph (l)(3)(i) of this section), or attestation by the State Attorney General as specified under subparagraph (l)(3)(ii) of this section.

(ix) A local government owner or operator using the local government guarantee supported by the local government fund must maintain a copy of the guarantor's year-end financial statements for the most recent completed financial reporting year showing the amount of the fund.

(x) (a) An owner or operator using an assurance mechanism specified in subdivision (e) through (l) of this section must maintain an updated copy of a certification of financial responsibility worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### Certification of Financial responsibility

[Owner or operator] hereby certifies that it is in compliance with the requirements of 6 NYCRR § 613-2.7.

The financial responsibility mechanism(s) used to demonstrate financial responsibility under 6 NYCRR § 613-2.7 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 compensating third parties for bodily injury caused by either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases."]

[Signature of owner or operator]

[Name of owner or operator]

[Title]  
[Date]  
[Signature of witness or notary]  
[Name of witness or notary]  
[Date]

(b) The owner or operator must update this certification whenever the financial responsibility mechanism(s) used to demonstrate financial responsibility change(s).

(q) *Drawing on financial responsibility mechanisms.*

(1) Except as specified in paragraph (4) of this subdivision, the Department will require the guarantor to place the amount of funds stipulated by the Department, up to the limit of funds provided by the financial responsibility mechanism, into the standby trust if:

(i) (a) The owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee or, as applicable, other financial responsibility mechanism; and

(b) The Department determines or suspects that a release from an underground storage tank covered by the mechanism has occurred and so notifies the owner or operator or the owner or operator has notified the Department pursuant to § 613-2.4 of this Part or Subpart 613-6 of this Part of a release from an underground storage tank covered by the mechanism; or

(ii) The conditions of subparagraph (2)(i) or clauses (2)(ii) (a) or (b) of this subdivision are satisfied.

(2) The Department may draw on a standby trust fund when the Department has received either:

(i) Certification from the owner or operator and the third-party bodily injury claimant(s) and from attorneys representing the owner or operator and the third-party bodily injury claimant(s) that a third-party bodily injury claim should be paid. The certification must be worded as follows, except that instructions in brackets are to 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 caused by an accidental release arising from operating [owner's or operator's] underground storage tank should be paid in the amount of \$[ \_\_\_\_\_ ].

[Signatures]

Owner or Operator

Attorney for Owner or Operator  
(Notary)  
Date

[Signatures]

Claimant(s)  
Attorney(s) for Claimant(s)  
(Notary)  
Date

or

(ii) A valid final court order establishing a judgment against the owner or operator for bodily injury caused by an accidental release from an underground storage tank covered by financial responsibility under this section and the Department determines that the owner or operator has not satisfied the judgment.

(3) If the Department determines that the amount of third-party bodily injury claims eligible for payment under paragraph (2) of this subdivision may exceed the balance of the standby trust fund and the obligation of the provider of financial responsibility, the Department will pay third-party bodily injury claims in the order in which the Department receives certifications under subparagraph (2)(i) of this subdivision, and valid court orders under subparagraph (2)(ii) of this subdivision.

(4) A governmental entity acting as guarantor under paragraph (k)(5) of this section, the local government guarantee without standby trust, must make payments as directed by the Department under the circumstances described in paragraphs (q)(1), (q)(2), and (q)(3) of this section.

(r) *Release from the requirements.* An owner or operator is no longer required to maintain financial responsibility for an underground storage tank after the tank has been permanently closed.

(s) *Bankruptcy or other incapacity of owner or operator or provider of financial responsibility.*

(1) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming an owner or operator as debtor, the owner or operator must notify the Department by certified mail of such commencement and submit the appropriate forms listed in paragraph (p)(2) of this section documenting current financial responsibility.

(2) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing financial responsibility as debtor, such guarantor must notify the owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in subdivision (e) of this section.

(3) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a local government owner or operator as debtor, the local government owner or operator must notify the Department by certified mail of such commencement and submit the appropriate forms listed in paragraph (p)(2) of this section documenting current financial responsibility.

(4) Within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a guarantor providing a local government financial responsibility as debtor, such guarantor must notify the local government owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in subdivision (k) of this section.

(5) An owner or operator who obtains financial responsibility by a mechanism other than the financial test of self-insurance will be deemed to be without the required financial responsibility in the event of a bankruptcy or incapacity of its provider of financial responsibility, or a suspension or revocation of the authority of the provider of financial responsibility to issue a guarantee, insurance policy, or risk retention group coverage policy. The owner or operator must obtain alternate financial responsibility as specified in this section within 30 days after receiving notice of such an event. If the owner or operator does not obtain alternate coverage within 30 days after such notification, he must notify the Department.

(t) *Replenishment of guarantees.*

(1) If at any time after a standby trust is funded upon the instruction of the Department with funds drawn from a guarantee, or local government guarantee with standby trust, and the amount in the standby trust is reduced below the full amount of coverage required, the owner or operator must by the anniversary date of the financial mechanism from which the funds were drawn:

(i) Replenish the value of financial responsibility to equal the full amount of coverage required, or

(ii) Acquire another financial responsibility 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 subdivision (c) of this section. 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.

**Subpart 613-3 UST Systems Subject Only to Title 10**

613-3.1 UST Systems: Design, Construction, and Installation

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

- (1) contains heating oil used for on-premises consumption;
- (2) has a design capacity of 1,100 gallons or less and is used to store motor fuel for non-commercial purposes (not for resale) at a farm or residence;
- (3) is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50; or
- (4) consists of a field-constructed tank.

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

(1) Tanks. Each tank must be properly designed and constructed, and any portion underground that routinely contains petroleum must be protected from corrosion, in accordance with one of the codes of practice specified in subparagraphs (i) through (iii) of this paragraph. In addition, all new or replaced tanks where installation began after December 27, 1986 must be secondarily contained in accordance with subparagraph (iv) of this paragraph:

(i) Every tank made of fiberglass-reinforced plastic (FRP) must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(a) For Category 2 USTs:

- (1) UL 1316, July 1983; or
- (2) CAN4-S615-M83, 1983.

(b) For Category 3 USTs:

- (1) UL 1316, January 1994; or
- (2) ULC-S615-98, 1998.

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

(a) The tank must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

- (1) For Category 2 USTs:
  - (i) UL 58, April 1981; or
  - (ii) ULC-S603-M1981, 1981.
- (2) For Category 3 USTs:
  - (i) UL 58, December 1996; or
  - (ii) ULC-S603-00, 2000.

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

(1) The tank must be coated with a suitable dielectric material;

(2) The cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

- (i) For Category 2 USTs:
  - (A) API RP 1632, January 1983;
  - (B) ULC-S603.1-M1982, 1982;
  - (C) sti-P<sub>3</sub><sup>®</sup>, July 1983; or
  - (D) NACE RP-01-69, January 1983.
- (ii) For Category 3 USTs:
  - (A) sti-P<sub>3</sub><sup>®</sup>, January 2013;
  - (B) UL 1746, January 2007;
  - (C) ULC-S603-00, 2000;
  - (D) STI F841, January 2006; or
  - (E) NACE SP0285-2011, 2011.
- (3) Every field-installed cathodic protection system

must be designed by a corrosion expert;

(4) Every impressed current system must be designed to allow determination of current operating status as required in section 613-3.2(b)(3) of this Part; and

(5) Every cathodic protection system must be operated and maintained in accordance with section 613-3.2(b) of this Part.

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

(a) The tank must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(1) For Category 2 USTs:

(i) UL 58, April 1981; or

(ii) ULC-S603-M1981, 1981.

(2) For Category 3 USTs:

(i) UL 58, December 1996; or

(ii) ULC-S603-00, 2000.

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

(1) The tank must be electrically insulated from the piping system with dielectric fittings, bushings, washers, sleeves or gaskets which are chemically stable when exposed to petroleum, petroleum additives, or corrosive soils.

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

perforated. The coating must be non-corrodible under adverse underground electrolytic conditions and must be chemically compatible with petroleum products and product additives.

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

(c) The tank in a Category 3 UST system must be clad or jacketed with a non-corrodible material which is designed, fabricated, and installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(1) UL 1746, January 2007;

(2) STI F894, January 2013;

(3) STI F961, January 2013; or

(4) STI F922, January 2013.

(iv) Every tank must be secondarily contained according to the following.

(a) Every secondarily contained tank must:

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

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

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

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

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

(ii) outer jackets made of steel must have a minimum thickness of 10-gauge and must be coated as prescribed in section 613-3.1(b)(1)(ii)(b)(1) or 613-3.1(b)(1)(iii)(b)(2) of this Part;

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

(iv) the outer jacket must cover at least the bottom 80 percent of the tank; and

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

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

(3) Cut-off walls. If a cut-off wall is used:

(i) The cut-off wall may be used only where groundwater levels are above the bottom of the tank excavation.

(ii) A cut-off wall must consist of an impermeable barrier which has a permeability rate to water equal to or less than  $1 \times 10^{-6}$  cm/sec. It must not deteriorate in an underground environment and in the presence of petroleum.

(iii) A cut-off wall must extend around the perimeter of the excavation and to an elevation below the lowest groundwater level.

(iv) If a synthetic membrane is used for a cut-off wall, any seams, punctures or tears in the membrane must be repaired and made leak tight prior to backfilling. No penetrations of the cut-off wall are allowed.

(v) Impervious native soil may serve as a cut-off wall when the impervious soil is continuous and is of sufficient depth, thickness, and extent to contain a leak. The soil must have a permeability rate to water equal to or less than  $1 \times 10^{-6}$  cm/sec.

(4) Impervious underlayment.

(i) An impervious underlayment may be used only under a tank at sites where groundwater levels are below the bottom of the excavation and

where soils are well drained. This underlayment must have a permeability rate to water equal to or less than  $1 \times 10^{-6}$  cm/sec and must not deteriorate in an underground environment and in the presence of petroleum. The underlayment may consist of impervious native soils, an impervious concrete pad, a synthetic membrane or any equivalent material. If a synthetic membrane is used, any seams, punctures or tears must be repaired prior to backfilling.

(ii) The underlayment must extend at least one foot beyond the sides and ends of the tank and must have a slope to the sump of at least one-quarter inch per foot. An observation well as required in section 613-3.3(c) of this Part must be positioned in the sump and extend to the surface of the excavation for the purpose of sampling for leakage and pumping out water or product which may accumulate.

(iii) Surface waters must be drained from the site using good engineering practices. This may include capping the site with asphalt, concrete or other impervious cover which is sloped to drainways leading away from the tanks.

(c) Every tank in a Category 3 UST system must be double-walled and must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

- (1) UL 58, December 1996;
- (2) UL 1316, January 1994;
- (3) UL 1746, January 2007;
- (4) STI F841, January 2006; or
- (5) STI F922, January 2013.

(2) Piping. Piping that routinely contains petroleum and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with subparagraphs (i) or (ii) of this paragraph.

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

(a) For all piping that is part of a Category 2 UST system:

(1) The materials, joints, and joint adhesives must be chemically compatible with petroleum, petroleum additives, and soil environments.

(2) Pipes, fittings, and adhesives must be designed, fabricated and factory-tested in accordance with generally accepted structural, material, and performance standards for pressurized underground piping systems.

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

(4) All underground piping systems must be installed in accordance with recognized engineering practices. All joints must be liquid and air tight.

(5) All underground piping systems must be tested for tightness before being covered, enclosed or placed in use.

(b) All piping that is part of a Category 3 UST system must be designed and constructed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(1) UL 971, February 2006; or

(2) ULC-S660-08, 2008.

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

(a) For all piping that is part of a Category 2 UST system:

(1) The cathodic protection system must be designed, fabricated, and installed in accordance with recognized standards and engineering practices.

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

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

(4) Where sacrificial anodes or impressed current systems are used, monitors to check on the adequacy of the system must be installed and kept in proper working condition. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the system must be restored or the piping system will be considered unprotected and must be tested for tightness in accordance with section 613-3.3(d)(2) of this Part.

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

(6) Pipes, fittings and adhesives must be designed,

fabricated, and factory-tested in accordance with generally accepted structural, material, and performance standards for pressurized underground piping systems.

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

(8) All underground piping systems must be installed in accordance with recognized engineering practices. All joints must be liquid and air tight.

(9) All underground piping systems must be tested for tightness in accordance with section 613-3.3(d)(2) of this Part before being covered, enclosed, or placed in use.

(b) All piping that is part of a Category 3 UST system must meet the following conditions:

(1) The piping must be coated with a suitable dielectric material;

(2) The cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

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

(ii) UL 971A, October 2006;

(iii) STI R892, January 2006;

(iv) NACE SP0169-2007, 2007; or

(v) NACE SP0285-2011, 2011.

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

(4) Every impressed current system must be designed to allow determination of current operating status as required in section 613-3.2(b)(2) of this Part; and

(5) Every cathodic protection system must be operated and maintained in accordance with section 613-3.2(b) of this Part.

(3) Overfill prevention equipment.

- (i) Overfill prevention equipment must be used that will:
  - (a) Automatically shut off flow into the tank when the tank is no more than 95 percent full;
  - (b) Alert the operator or carrier when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm; or
  - (c) Restrict flow 30 minutes prior to overfilling, alert the operator or carrier with a high-level alarm one minute before overfilling, or automatically shut off flow into the tank so that none of the fittings located on top of the tank are exposed to product due to overfilling.

(ii) A facility is not required to use the spill and overfill prevention equipment specified in subparagraph (i) of this paragraph if the UST system is filled by transfers of no more than 25 gallons at one time.

(4) Installation.

(i) Every tank and its associated piping must be installed in accordance with the manufacturer's instructions. This includes repair of any damage to the tank coatings prior to backfilling.

(ii) As-built information records and installer certification. The facility must maintain an accurate diagram showing:

- (a) the location of:
  - (1) each UST and its associated piping, including registration identification number;
  - (2) dispensers or loading equipment;
  - (3) check valves;
  - (4) transition sumps (if any); and
  - (5) monitoring or recovery wells (if any).
- (b) the following tank system attributes:
  - (1) physical dimensions of each tank (approximation if not known); and
  - (2) installation date for each portion of piping that was installed at a different time (approximation if not known).

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

(5) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. A valve meeting the standards set forth in NFPA No. 30A (1984 edition), section 4-3.6 (for Category 2 tank systems) meets the requirements of this subdivision.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the tank system in case of piping or dispenser hose failure. A valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 (for Category 2 tank systems) meets this requirement.

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

(iv) Each tank connection through which petroleum can normally flow must be equipped with an operating valve to control the flow. A valve which meets the standards set forth in NFPA No. 30 (1984 edition), section 2-2.7.1 (for Category 2 tank systems) meets the requirements of this paragraph.

### 613-3.2 General Operating Requirements

(a) *Spill and overflow prevention.*

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

(2) The facility must report, investigate, and clean up any spills and overfills in accordance with section 613-3.4(d) of this Part.

(3) Every Category 2 or 3 tank must have a label at the fill port specifying tank registration identification number, tank design and working capacities, and type of petroleum stored.

(4) Every tank system fill port must be color coded in accordance with API RP 1637. If a tank contains petroleum that does not have a corresponding API color code, the facility must otherwise permanently mark the fill port (for example, with stenciled letters) to identify the petroleum in the tank.

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

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

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

(b) *Operation and maintenance of corrosion protection.* All facilities having metal UST systems with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented until the UST system is permanently closed or undergoes a change in service pursuant to section 613-3.5(b) of this Part:

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

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

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

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

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

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

(d) *Lining of steel USTs.*

(1) Manufacturer's guarantee. An underground steel tank may be lined under the direction of the lining manufacturer or a certified representative. The manufacturer or representative must guarantee to the owner in writing that the lining will not fail, crack, separate, or deteriorate and the tank will not leak the product specified in storage for a period of ten years. A copy of the guarantee must be kept by the owner for the life of the tank.

(2) Structural requirements.

(i) A steel tank may be lined only if it meets the following structural conditions:

(a) it has a design shell thickness of seven gauge or more;

(b) the tank has a minimum metal thickness of 1/8 inch at holes after reaming;

(c) the tank has no open seam or split;

(d) the tank has less than ten holes with none larger than 1/2 inch in diameter; and

(e) the tank meets all standards for structural soundness of the lining manufacturer.

(ii) A tank which fails to meet all of the requirements of subparagraph (i) of this paragraph must be permanently closed in accordance with section 613-3.5(b) of this Part.

(iii) To determine adherence to the requirements of subparagraph (i) of this paragraph, the entire interior surface of the tank must be tapped with a ballpeen hammer for soundness or inspected using other equivalent or superior nondestructive methods. Weak areas, holes and seams must be ballpeen hammered (before and after sandblasting) to obtain structurally sound edges. Holes and seams must be reamed until the edges of the opening are a minimum of 1/8 inch thick.

(3) Preparation of tank interior.

(i) Cleaning of tank prior to lining. Prior to lining, a tank must be cleaned in accordance with generally accepted practices. Wash water must not be discharged to the lands or waters of the State if the discharge would contravene the standards of Part 701, 702 or 703 of this Title.

(ii) Sludge removal. Sludge accumulation on the bottom of the tank must be removed, transported, and disposed of in a manner consistent with all State and federal requirements for solid waste disposal.

(iii) Sandblasting of internal surfaces. The entire internal tank surface must be sandblasted completely free of scale, rust, and foreign matter. Following sandblasting, the entire surface must be brushed and vacuumed such that the surface when viewed without magnification is free of all moisture and foreign matter.

(iv) Plugging of perforations. All perforations must be tightly plugged with boiler plugs or screws made of noncorrodible plastic. Boiler plugs or screws must be covered with a laminate of resin and fiberglass cloth which overlaps all sides of the plug with a minimum of six inches and which has a minimum area of 144 square inches.

(4) Installation of striker plates. Prior to applying the coating material, a 10-gauge steel plate which covers a minimum of 144 square inches must be installed and centered under the fill tube and gauging tube. The plate must be bonded to the interior surface of the tank.

(5) Lining specifications.

(i) Any noncorrodible epoxy based resins, isophthalic polyester-based resins, or equivalent coating may be used for lining a steel tank if the lining is of sufficient thickness, density, and strength to form a hard impermeable shell which will not leak, crack, wear, soften, or separate from the interior surface of the tank.

(ii) The lining when applied to properly prepared steel as required in section 613-3.2(d)(3) of this Part must maintain a permanent bond to the tank.

(iii) The lining's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the coating.

(iv) The lining must be chemically compatible with petroleum products and product additives.

(6) Application of lining.

(i) The lining must be applied and cured in strict accordance with manufacturer's specifications.

(ii) The lining must be applied as soon as possible but not later than eight hours after sandblasting and cleaning of the internal surface. Visible rust, moisture, or foreign material must not be present.

(7) Inspection of lining. The lining must be checked for air pockets and blisters and electrically tested for pinholes. The lining thickness must be checked with an Elcometer Thickness Gauge or equivalent and the hardness checked with a Barcol Hardness Tester or equivalent to assure compliance with manufacturer's specifications. Any defects must be repaired.

(8) Tank closings.

(i) If the tank has a manway, the manway cover gasket must be replaced with a new one before resealing.

(ii) If the tank does not have a manway and an opening has been cut, the tank must have a manway properly welded in place prior to beginning work or the tank must be sealed as follows:

(a) A 1/4-inch thick steel cover plate, rolled to the contour of the tank exterior must be made to overlap the hole at least two inches on each side (for example, the cover plate should measure at least 26"×26" if the opening was cut 22"×22").

(b) The cover must be used as a template to locate 3/4-inch diameter holes on five-inch centers, one inch from the edge of the cover.

(c) The cover plate must be sandblasted and both sides and the entire inside surface of the plate must be covered with coating material to act as a gasket.

(d) Before the coating on the cover cures, the cover must be fastened to the tank using 1/2-inch minimum diameter bolts. The bolt shafts are to be placed through the holes from the inside of the tank and held in place by spring clips, then fastened with lock washers and nuts which have been dipped in a seam sealer.

(e) After being bolted to the tank, the cover plate and surrounding tank surface must be properly sandblasted, coated with coating material, and allowed to cure before backfilling the hole.

(9) Tank tightness testing. Following closure of the tank and before backfilling, the relined tank must be given a tightness test and a test report must be sent to the Department.

(e) *Tank systems in locations subject to flooding.* For a tank system located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water, the facility must maintain safeguards in accordance with sections 2.3.2.6 and 2.3.3.5 of NFPA 30 (1984 edition) for Category 2 tank systems. 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 if the discharge would contravene the standards of Parts 701, 702 or 703 of this Title.

613-3.3 Leak Detection

(a) *Leak detection requirements for all UST systems.*

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

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

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

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

(2) When a leak detection method operated in accordance with the requirements of subdivisions (c) and (d) of this section indicates that a leak may have occurred, facilities must notify the Department in accordance with section 613-3.4(a) of this Part.

(3) Additional testing and inspection. When a leak is suspected, or where tests or inspections required by this Part have not been performed, the Department may order the facility to inspect and to test the tank system or equipment for tightness and structural soundness. If the facility fails to conduct such tests and inspections within ten days, 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 facility owner.

(4) A facility that cannot implement a method of leak detection that complies with the requirements of this section must temporarily take the UST system out of service pursuant to section 613-3.5(a) of this Part.

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

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

(i) Any tank that is part of a Category 1 UST system must be tested for tightness in accordance with section 613-3.3(c)(1) of this Part at yearly intervals.

(ii) Any tank that is part of a Category 2 UST system must be monitored for leaks using one of the methods listed in sections 613-3.3(c)(2) through (4) of this Part at weekly intervals.

(iii) Any tank that is part of a Category 3 UST system must be monitored for leaks in accordance with section 613-3.3(c)(4) of this Part at weekly intervals.

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

(i) Pressurized piping. Piping that conveys petroleum under pressure

must be monitored for leaks in accordance with the following:

(a) Pressurized piping that is part of a Category 1 UST system must be tested for tightness in accordance with section 613-3.3(d)(2) of this Part at yearly intervals.

(b) Pressurized piping that is part of a Category 2 UST system must be equipped with an automatic line leak detector that is operated in accordance with section 613-3.3(d)(1) of this Part.

(c) Pressurized piping that is part of a Category 3 UST system storing motor fuel must be equipped with an automatic line leak detector that is operated in accordance with section 613-3.3(d)(1) of this Part and must be monitored for leaks in accordance with section 613-3.3(d)(3) of this Part at weekly intervals.

(ii) Suction piping. Suction piping that is part of a Category 1 UST system must be tested for tightness in accordance with section 613-3.3(d)(2) of this Part at yearly intervals.

(c) *Methods of leak detection for tanks.* Each method of leak detection for tanks used to meet the requirements of subdivision (b) of this section must be conducted in accordance with the following:

(1) Periodic tightness testing.

(i) Qualifications of test technicians. All tightness tests must be performed by a technician who has an understanding of variables which affect the test and is trained in the performance of the test.

(ii) Test reports.

(a) A test report must be provided by the facility to the Department no later than 30 days after performance of the test.

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

- (1) facility registration number;
- (2) identification number used on the application form required in section 613-1.9(e) of this Part for tank and piping system tested;
- (3) date of test;
- (4) results of test;

- (5) test method;
- (6) certification by the technician that test complies with criteria for a tightness test in subparagraph (iii) of this paragraph;
- (7) statement of technician's qualifications;
- (8) address of technician; and
- (9) signature of technician.

(iii) Tank tightness testing (or another test of equivalent performance) must be capable of detecting a leak at the rate of 0.1 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 product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

(2) Automatic tank gauging. Equipment for automatic tank gauging that tests for the loss of petroleum and conducts inventory monitoring 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; and
- (ii) The test must be performed with the system operating in one of the following modes:
  - (a) In-tank static testing conducted on a periodic basis; or
  - (b) Continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the tank at weekly intervals.

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

- (i) The petroleum stored is immiscible in water and has a specific gravity of less than one;
- (ii) Groundwater is never more than 20 feet from the ground surface and the hydraulic conductivity of the soil(s) between the UST system and the monitoring wells or devices is not less than 0.01 cm/sec (for example, the soil should consist of gravels, coarse to medium sands, coarse silts, or other permeable materials);
- (iii) The slotted portion of the monitoring well casing must be designed to prevent migration of natural soils or filter pack into the well and to allow entry of petroleum

on the water table into the well under both high and low groundwater conditions;

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

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

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

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

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

(4) Interstitial monitoring. Interstitial monitoring between the UST system and a secondary barrier immediately around or beneath it may be used if the system is designed, constructed, and installed to detect a leak from any portion of the tank that routinely contains petroleum; if the system meets one of the requirements set forth in subparagraphs (i) through (iii) of this paragraph; and if the facility records, at weekly intervals, the results of the interstitial monitoring, including continuous monitoring.

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

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

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

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

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

system;

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

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

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

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

(d) *Methods of leak detection for piping.* Each method of leak detection for piping used to meet the requirements of section 613-3.3(b)(2) of this Part must be conducted in accordance with the following:

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

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

(3) Interstitial monitoring. Monitoring of the interstitial space between the inner and outer walls of the piping may be used if the piping is designed, constructed and installed to detect a leak from any portion of the piping that routinely contains petroleum.

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

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

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

(3) Written documentation of all calibration, maintenance, and repair of leak detection equipment permanently located on-site must be maintained for at least three years after

the servicing work is completed. Any schedules of required calibration and maintenance provided by the leak detection equipment manufacturer must be retained for three years from the date of installation.

#### 613-3.4 Reporting, Investigation, and Confirmation

(a) *Reporting of suspected leaks.* Facilities must report a suspected leak to the Department's Spill Hotline (518-457-7362) within two hours and follow the procedures in subdivision (b) of this section for any of the following conditions:

(1) The discovery of petroleum outside of a tank system at the facility or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water).

(2) Unusual operating conditions observed (such as the erratic behavior of petroleum dispensing equipment, the sudden loss of product from the tank system, an unexplained presence of water in the tank, or water or petroleum in the interstitial space of secondarily contained systems), unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced.

(3) Monitoring results, including alarms, from a leak detection method required under subdivision (a) of this section indicate that a leak may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result.

(b) *Investigation due to off-site impacts.* A facility must follow the procedures in subdivision (c) of this section to determine if the UST system is the source of off-site impacts. These impacts include the discovery of petroleum (such as 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.

(c) *Leak investigation and confirmation steps.* Unless corrective action is initiated in accordance with Subpart 613-6 of this Part, a facility must investigate any suspected leak of petroleum using either one of the methods described in paragraphs (1) or (2) of this subdivision or another procedure approved by the Department. The investigation must commence within 48 hours following the reporting required under section 613-3.4(a) of this Part of any suspected leak of petroleum. The investigation must be completed within seven days following the reporting required under section 613-3.4(a) of this Part of any suspected leak of petroleum.

(1) System test. Every facility must conduct tightness tests pursuant to sections 613-3.3(c)(1) and (d)(2) of this Part to determine whether a leak exists in the tank system. Tank system tightness testing (or another test of equivalent performance) must be capable of detecting a leak at the rate of 0.1 gallons per hour from any portion of the tank, or a leak at the rate of 0.1 gallons per hour at one and one-half times the operating pressure from the piping, while accounting for the effects of thermal expansion or contraction of the product, vapor

pockets, tank deformation, evaporation or condensation, and the location of the water table.

(i) If the system test confirms a leak, the facility must act in accordance with subdivision (c) of this section before any repair to the UST system is undertaken.

(ii) Further investigation is not required if the test results for the tank system do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a leak.

(iii) The facility must conduct a site check as described in paragraph (2) of this subdivision if the test results for the tank system do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Every facility must measure for the presence of a release where contamination is most likely to be present at the facility. In selecting sample types, sample locations, and measurement methods, the facility must consider the nature of the type of petroleum, the type of initial alarm or cause for suspicion, the type of backfill, the depth of groundwater, and other factors appropriate for identifying the presence and source of the release.

(i) If the test results for the excavation zone or the UST system location indicate that a release has occurred, the facility must begin corrective action in accordance with Subpart 613-6 of this Part;

(ii) If the test results for the excavation zone or the UST system location do not indicate that a release has occurred, further investigation is not required.

(d) *Response to spills and overfills.*

(1) A facility must report every spill to the Department's Spill Hotline (518-457-7362) within two hours, contain the spill, and begin corrective action in accordance with the requirements of Subpart 613-6 of this Part except if the spill meets the following conditions:

(i) It 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 land or waters of the State;

and

(iv) It is cleaned up in accordance with the requirements of Subpart 613-6 of this Part within two hours of discovery.

(2) A facility must immediately discontinue operation of any leaking UST system and take the UST system temporarily out-of-service or close the UST system pursuant to provisions of sections 613-3.5(a) or (b) of this Part, respectively.

613-3.5 Out-of-Service UST Systems and Closure

(a) *Temporarily out-of-service.*

(1) When a UST system is temporarily out-of-service, the facility must continue operation and maintenance of corrosion protection in accordance with section 613-3.2(b) of this Part, and any leak detection in accordance with section 613-3.3 of this Part. Subpart 613-6 of this Part must be complied with if a release is confirmed. However, leak detection is not required as long as the UST system is empty. The UST system is considered empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue remain in the system.

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

- (i) Leave vent lines open and functioning; and
- (ii) Cap and secure all other piping, ancillary equipment, and manways.

(b) *Permanent closure.*

(1) At least 30 days before beginning permanent closure, a facility must notify the Department of its intent to permanently close, unless such action is in response to corrective action.

(2) To permanently close a UST system:

(i) The facility must empty and clean it by removing all liquids and accumulated sludge. Every tank that is part of tank system that is taken out of service permanently must also be either removed from the ground or filled with an inert solid material (such as sand or concrete slurry). If an inert solid material is used, all voids within the tank must be filled. All connecting and fill lines must be disconnected and removed or securely capped or plugged. Manways must be securely fastened in place.

(ii) The facility must assure that all scheduled deliveries to the tank system are terminated. One of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references) must be adhered to in order to comply with this subdivision:

- (a) API RP 1604, March 1996;
- (b) API Standard 2015, August 2001;

- (c) API RP 2016, August 2001;
- (d) API RP 1631, June 2001; or
- (e) NFPA 326, 2010 edition.

(c) *Records for permanent closure.* The facility must maintain for three years records that are capable of demonstrating compliance with closure requirements under this Subpart. In addition, the facility must transmit the records to the Department no later than 30 days after permanent closure.

## **Subpart 613-4      AST Systems**

### 613-4.1      AST Systems: Design, Construction, and Installation

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

(b) *Equipment standards for Category 2 and 3 AST systems.* In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the AST system is used to store petroleum, every Category 2 or 3 AST system at a facility must meet the following requirements.

(1) Tanks.

(i) Every tank:

(a) must be designed, constructed, and utilized according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(I) For Category 2 ASTs:

- (i) UL 142, January 1985;
- (ii) API Standard 620, September 1982 (revised April 1985);
- (iii) API Standard 650, February 1984;
- (iv) CAN-S601-M84, 1984; or
- (v) CAN4-S630-M84, 1984.

- (2) For Category 3 ASTs:
  - (i) UL 142, December 2006;
  - (ii) UL 80, September 2007;
  - (iii) UL 2258, August 2010;
  - (iv) API Standard 620, February 2008;
  - (v) API Standard 650, March 2013; or
  - (vi) ULC-S601-07, 2007.

(b) must have a surface coating designed to prevent corrosion and deterioration; and

(c) if in contact with soil, must be protected from corrosion in accordance with API Standard 651.

(ii) Secondary containment.

(a) Any tank system with a tank that has a design capacity of 10,000 gallons or more must have secondary containment that meets the following requirements:

(1) be able to contain petroleum leaked from any portion of the tank until it is detected and removed; and

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

(b) Any tank system with a tank that has a design capacity of less than 10,000 gallons that is in close proximity to waters of the State is required to either have secondary containment as described in subparagraph (a) of this paragraph or utilize a design/technology such that a release is not reasonably expected to occur. Facilities within 500 horizontal feet of the following resources are considered to be in close proximity to ground or surface waters:

(1) A perennial or intermittent stream;

(2) A public or private well;

(3) A primary or principal aquifer as defined in USGS Water Resource Investigation Reports 87-4274, 87-4275, 87-4276, 87-4122, 88-4076, and Appendix C;

- (4) A wetland as defined in Part 664 of this Title;
- (5) A lake/pond, estuary, etc.; or
- (6) A storm drain.

(c) An impermeable barrier under a tank must have a permeability rate to water equal to or less than  $1 \times 10^{-6}$  cm/sec and must not deteriorate in an underground environment or in the presence of petroleum. All ASTs must be capable of being monitored between the tank bottom and the impermeable barrier.

(d) The secondary containment system may consist of a combination of dikes, under-tank liners, pads, ponds, impoundments, curbs, ditches, sumps, receiving tanks, or other equipment capable of containing the petroleum stored. Construction of diking and the capacity of the diked area must be in accordance with the following:  
Category 2 AST systems: NFPA No. 30 (1984 edition), section 2-2.3.3; or  
Category 3 AST systems: NFPA No. 30 (2012 edition), section 22.11.2.

(2) Piping. Piping that routinely contains petroleum and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with subparagraphs (i) or (ii) of this paragraph.

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

(a) For all piping that is part of a Category 2 AST system:

(1) The materials, joints, and joint adhesives must be chemically compatible with petroleum, petroleum additives, and soil environments.

(2) Pipes, fittings, and adhesives must be designed, fabricated and factory-tested in accordance with generally accepted structural, material, and performance standards for pressurized underground piping systems.

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

(4) All underground piping systems must be installed in accordance with recognized engineering practices. All joints must be liquid and air tight.

(5) All underground piping systems must be tested for tightness before being covered, enclosed or placed in use.

(b) All piping that is part of a Category 3 AST system must be designed and constructed according to one of the following codes of practice (refer to section

613-1.10 of this Part for complete citation of references):

(1) UL 971, February 2006; or

(2) ULC-S660-08, 2008.

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

(a) For all piping that is part of a Category 2 AST system:

(1) The cathodic protection system must be designed, fabricated, and installed in accordance with recognized standards and engineering practices.

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

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

(4) Where sacrificial anodes or impressed current systems are used, monitors to check on the adequacy of the system must be installed and kept in proper working condition. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the system must be restored or the piping system will be considered unprotected and must be tested for tightness in accordance with section 613-4.1(b)(4)(ii) of this Part.

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

(6) Pipes, fittings and adhesives must be designed, fabricated, and factory-tested in accordance with generally accepted structural, material, and performance standards for pressurized underground piping systems.

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

(8) All underground piping systems must be installed in accordance with recognized engineering practices. All joints must be liquid and air tight.

(9) All underground piping systems must be tested for tightness in accordance with section 614-4.3(c)(2) of this Part before being covered, enclosed, or

placed in use.

(b) All piping that is part of a Category 3 AST system must meet the following conditions:

(1) The piping must be coated with a suitable dielectric material;

(2) The cathodic protection system must be designed, fabricated, and installed according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

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

(ii) UL 971A, October 2006;

(iii) STI R892, January 2006;

(iv) NACE SP0169-2007, 2007; or

(v) NACE SP0285-2011, 2011.

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

(4) Every impressed current system must be designed to allow determination of current operating status as required in section 613-4.2(b)(2) of this Part; and

(5) Every cathodic protection system must be operated and maintained in accordance with section 613-4.2(b) of this Part.

(3) Overfill prevention equipment. Every AST must be equipped with a gauge which accurately shows the level of petroleum in the tank. The gauge must be accessible to the carrier and be installed so it can be conveniently read. A high-level warning alarm, a high-level liquid pump cut-off controller, or equivalent device may be used in lieu of a gauge.

(4) Installation.

(i) Every AST system must be 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.

(ii) Before being placed into service, every AST must be tested for tightness and inspected according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

- (a) API Standard 650, March 2013;
- (b) API Standard 653, April 2009;
- (c) PEI RP200, 2013 edition;
- (d) STI SP001, September 2001; or
- (e) UL 142, December 2006.

(iii) All underground piping must be installed with access ports to permit tightness testing without the need for extensive excavation.

(iv) All underground piping must be tested for tightness pursuant to section 613-4.3(d)(2) of this Part before being covered, enclosed, or placed into service.

(5) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. A valve meeting the standards set forth in NFPA No. 30A (1984 edition), section 4-3.6 (for Category 2 tank systems) meets the requirements of this subdivision.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the tank system in case of piping or dispenser hose failure. A valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 (for Category 2 tank systems) meets this requirement.

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

(iv) Each tank connection through which petroleum can normally flow must be equipped with an operating valve to control the flow. A valve which meets the standards set forth in NFPA No. 30 (1984 edition), section 2-2.7.1 (for Category 2 tank systems) meets the requirements of this paragraph.

(c) *Equipment standards for Category 1 AST systems.* In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the AST system is used to store petroleum, every facility containing a Category 1 AST system must meet the following

requirements.

(1) Secondary containment.

(i) Any tank system that can reasonably be expected to release petroleum waters of the State, or which has a tank with a design capacity of 10,000 gallons or more, must have secondary containment that meets the following:

(a) be able to contain petroleum leaked from any portion of the tank until it is detected and removed; and

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

(ii) The secondary containment system may consist of a combination of dikes, under tank liners, pads, ponds, impoundments, curbs, ditches, sumps, receiving tanks, or other equipment capable of containing the petroleum stored. Construction of diking and the capacity of the diked area must be in accordance with NFPA No. 30 (1984 edition), section 2-2.3.3 for Category 2 tank systems.

(iii) If soil is used for the secondary containment system, it must be of such character that any spill onto the soil will be readily recoverable and will result in a minimal amount of soil contamination.

(2) Overfill prevention equipment. Every AST must be equipped with a gauge which accurately shows the level of product in the tank. The gauge must be accessible to the carrier and be installed so it can be conveniently read. A high-level warning alarm, a high-level liquid pump cut-off controller, or equivalent device may be used in lieu of a gauge.

(3) Valves.

(i) Every dispenser of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) that is located in the supply line at the inlet of the dispenser. The valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. A valve meeting the standards set forth in NFPA No. 30A (1984 edition), section 4-3.6 (for Category 2 tank systems) meets the requirements of this subdivision.

(ii) Every dispenser of motor fuel that causes a gravity head must be equipped with a device such as a solenoid valve that is positioned adjacent to and downstream from the operating valve. The valve must be installed and adjusted so that liquid cannot flow by gravity from the tank system in case of piping or dispenser hose failure. A valve meeting the standards set forth in NFPA 30A (1984 edition), section 2-1.7 (for Category 2 tank systems) meets this requirement.

(iii) All fill pipes leading to a pump filled tank must be equipped with a properly functioning check valve or equivalent device which provides automatic protection

against backflow. A check valve is required only when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.

(iv) Each tank connection through which petroleum can normally flow must be equipped with an operating valve to control the flow. A valve which meets the standards set forth in NFPA No. 30 (1984 edition), section 2-2.7.1 for (Category 2 tank systems) meets the requirements of this paragraph.

#### 613-4.2 General Operating Requirements

(a) *Spill and overflow prevention.*

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

(2) The facility must report, investigate, and clean up any spills and overfills in accordance with section 613-4.4(d) of this Part.

(3) Every tank system fill port must be color coded in accordance with API RP 1637. If a tank contains petroleum that does not have a corresponding API color code, the facility must otherwise permanently mark the fill port (for example, with stenciled letters) to identify the petroleum in the tank system.

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

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

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

(b) *Operation and maintenance of corrosion protection.* Every facility having a metal tank system with corrosion protection must comply with the following requirements to ensure that a release due to corrosion is prevented until the tank system is permanently closed or undergoes a change in service pursuant to section 613-4.5(b) of this Part:

(1) Every corrosion protection system must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank

and piping that routinely contains petroleum and is in contact with the ground.

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

(i) Frequency. Every cathodic protection system must be tested at yearly intervals; and

(ii) Inspection criteria. The criteria that are used to determine that cathodic protection is adequate as required by this section must be according to one of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references):

(a) API RP 651, January, 2007; or

(b) NACE RP0193-2001, 2001 edition.

(3) Every AST system with impressed current cathodic protection systems must also be inspected every 60 days to ensure the equipment is running properly.

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

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

(d) *Repairs*.

(1) Permanent repairs.

(i) All repairs must be permanent in nature and equal to or better than the standards of original construction. Such repairs must consist of:

(a) steel welds or steel patches which are welded in place in accordance with accepted practices; or

(b) practices set forth for lining of underground tanks, as described in section 613-3.2(d) of this Part.

(ii) All welds associated with the repair of a tank must be inspected and tested for tightness before the tank is returned to service.

(iii) Linings, coatings, grouts and other sealing materials which are

chemically compatible with the petroleum product being stored may be used in conjunction with a permanent steel tank repair as outlined above, but by themselves are not acceptable permanent repairs.

(2) Cleaning of tank prior to repair.

(i) Prior to repair, a tank must be cleaned in accordance with generally accepted practices. Wash water must not be discharged to the waters of the State if the discharge would contravene the standards of Part 701, 702 or 703 of this Title.

(ii) Sludge which has accumulated on the bottom of the tank must be removed, transported, and disposed of in a manner consistent with all applicable State and federal requirements for solid waste disposal.

(3) Coating (lining) specifications.

(i) Any noncorrodible epoxy-based resins, isophthalic polyester-based resins, or equivalent coating which is bonded firmly to the interior surfaces may be used as a coating to protect a tank from future corrosion.

(ii) The coating must be applied as soon as possible, but not later than eight hours after sandblasting and cleaning of the internal surface. Visible rust, moisture or foreign matter must not be present.

(iii) The coating must be of sufficient thickness, density, and strength to form a hard impermeable shell which will not crack, soften, or separate from the interior surface of the tank. The coating when applied to properly prepared steel must maintain a permanent bond to the tank.

(iv) The coating's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the coating.

(v) The coating must be chemically compatible with petroleum products and product additives.

(vi) The coating material must be applied and cured in strict accord with manufacturer's specifications.

(vii) Coatings used to protect the bottom of a tank must extend up the side of the tank a minimum of 18 inches.

(4) Inspection of coating. The coating must be checked for blisters, air pockets, and electrically tested for pinholes. The coating thickness must be checked with an Elcometer Thickness Gauge or equivalent and the hardness checked with a Barcol Hardness Tester or equivalent to assure compliance with manufacturer's specifications. Any defects must

be repaired.

(5) **Manufacturer's guarantee.** An interior coating must be installed under the direction of the lining manufacturer or a certified representative. The manufacturer or representative must guarantee to the owner in writing that the coating will not leak the product specified in storage and the lining will not deteriorate in any way for a period of 10 years. A copy of the guarantee must be kept by the owner for the life of the tank.

(e) *Tank systems in locations subject to flooding.* For a tank system located in an area where the tank may become buoyant because of a rise in the water table, flooding, or accumulation of water, the facility must maintain safeguards in accordance with sections 2.3.2.6 and 2.3.3.5 of NFPA 30 (1984 edition) for Category 2 tank systems. 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 if the discharge would contravene the standards of Parts 701, 702 or 703 of this Title.

(f) *Stormwater management.* Stormwater which collects within the secondary containment system must be controlled by a manually operated pump or siphon, or a gravity drain pipe which has two manually controlled dike valves, one on each side 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.

#### 613-4.3 Inspections and Leak Detection

(a) *Specific requirements for Category 1, 2, and 3 AST systems.*

(1) Tank systems.

(i) Every facility having an AST system must inspect the tank system at monthly intervals in accordance with section 613-4.3(c)(1) of this Part.

(ii) Every facility having a Category 1 tank system with a design capacity of 10,000 gallons or more, or with a design capacity less than 10,000 gallons which could reasonably be expected to release petroleum to the waters of the State, must perform at ten year intervals a detailed inspection in accordance with section 613-4.3(c)(2) of this Part. Ten-year inspections are not required for:

(a) tank systems having a tank which is entirely aboveground, such as a tank on a rack, cradle or stilts; or

(b) tank systems storing No. 5 or No. 6 fuel oil.

(2) Underground piping. Underground piping that routinely contains

petroleum must be monitored for leaks in a manner that meets one of the following requirements:

(i) Underground pressurized piping. Underground piping that conveys petroleum under pressure must be monitored for leaks in accordance with the following:

(a) Piping that is part of a Category 1 AST system must be tested for tightness in accordance with section 613-4.3(d)(2) of this Part at ten year intervals.

(b) Piping that is part of a Category 2 AST system must be equipped with an automatic line leak detector that is operated in accordance with section 613-4.3(d)(1) of this Part.

(c) Piping that is part of a Category 3 AST system must be equipped with an automatic line leak detector that is operated in accordance with section 613-4.3(d)(1) of this Part.

(ii) Underground suction piping and gravity-fed piping. Underground piping that conveys petroleum under suction or hydrostatic pressure from the tank and is part of a Category 1 AST system must be tested for tightness in accordance with section 613-4.3(d)(2) of this Part at ten-year intervals.

(b) *Inspections for tank systems.* Inspections for tanks used to meet the requirements of this subdivision must be conducted in accordance with the following:

(1) Monthly inspections. The inspection must include:

(i) inspecting exterior surfaces of tanks, piping, and ancillary equipment for leaks and maintenance deficiencies;

(ii) identifying 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; and

(iii) inspecting and monitoring all leak detection systems, cathodic protection monitoring equipment, or other monitoring or warning systems which may be in place.

(2) Ten-year inspections. The facility must perform one of the following at ten-year intervals:

(i) A tightness test of the tank, piping, and ancillary equipment; or

(ii) An inspection that is conducted in accordance with API Standard 653 or STI SP001, and a tightness test of any underground piping.

(c) *Methods of leak detection for piping.* Each method of leak detection for piping

used to meet the requirements of subdivision (b) of this section must be conducted in accordance with the following:

(1) Automatic line leak detectors. An automatic line leak detector is a method which alerts the operator to the presence of a leak by restricting or shutting off the flow of petroleum through piping or triggering an audible or visual alarm. An automatic line leak detector may be used only if it will detect a leak of three gallons per hour at ten pounds per square inch line pressure within one hour.

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

(3) Interstitial monitoring. Monitoring of the interstitial space between the inner and outer walls of the piping may be used if the piping is designed, constructed and installed to detect a leak from any portion of the piping that routinely contains petroleum.

(d) *Inspection and leak detection recordkeeping.* Every facility must maintain records demonstrating compliance with all applicable requirements of this section. These records must include the results of monthly and ten-year inspections, as well as those of annual operation tests. Monthly inspection and annual operation test records must be maintained for at least three years. Ten-year inspection records must be maintained for at least ten years. At a minimum, the records must list each component tested and describe any action taken to correct an issue.

(e) *Additional testing and inspection.* When a leak is suspected, or where tests or inspections required by this Part have not been performed, the Department may order the facility to inspect and to test the tank system or equipment for tightness. If the facility fails to conduct such tests and inspections within 10 days of 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.

#### 613-4.4 Reporting, Investigation, and Confirmation

(a) *Reporting of suspected leaks.* Facilities must report a suspected leak to the Department's Spill Hotline (518-457-7362) within two hours and follow the procedures in subdivision (b) of this section for any of the following conditions:

(1) The discovery of petroleum outside of a tank system at the facility or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water).

(2) Unusual operating conditions observed (such as the erratic behavior of petroleum-dispensing equipment, the sudden loss of product from the tank system, an unexplained presence of water in the tank, or water or petroleum in the interstitial space of

secondarily contained systems), unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced.

(3) Monitoring results, including alarms, from a leak detection method required under section 613-4.3 of this Part indicate that a leak may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated, or replaced, and additional monitoring does not confirm the initial result.

(b) *Investigation due to off-site impacts.* A facility must follow the procedures in subdivision (c) of this section to determine if the UST system is the source of off-site impacts. These impacts include the discovery of petroleum (such as 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.

(c) *Leak investigation and confirmation steps.* Unless corrective action is initiated in accordance with Subpart 613-6 of this Part, a facility must investigate any suspected leak of petroleum using either one of the methods described in paragraphs (1) or (2) of this subdivision or another procedure approved by the Department. The investigation must commence within 48 hours following the reporting required under section 613-4.4(a) of this Part of any suspected leak of petroleum. The investigation must be completed within seven days following the reporting required under section 613-4.4(a) of this Part of any suspected leak of petroleum.

(1) Inspection. Every facility must conduct a tank system inspection in accordance with section 613-4.3(c)(2)(ii) of this Part to determine whether a leak exists in the tank system.

(i) If the inspection confirms a leak, the facility must act in accordance with subdivision (c) of this section before any repair to the AST system is undertaken.

(ii) Further investigation is not required if the inspection does not indicate that a leak exists and if environmental contamination is not the basis for suspecting a leak.

(iii) The facility must conduct a site check as described in paragraph (2) of this subdivision if the inspection results for the tank system do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Every facility must measure for the presence of a release where contamination is most likely to be present at the AST site. In selecting sample types, sample locations, and measurement methods, the facility must consider the nature of the type of petroleum, the type of initial alarm or cause for suspicion, the depth of groundwater, and other factors appropriate for identifying the presence and source of the release.

(i) If the test results indicate that a release has occurred, the facility must immediately discontinue operation of the AST or associated equipment and temporarily close the AST system pursuant to provisions of section 613-4.5(a) of this Part. The facility may

then repair, replace or permanently close the AST system. In addition, the facility must begin corrective action in accordance with Subpart 613-6 of this Part;

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

(d) *Response to spills and overfills.*

(1) A facility must report every spill to the Department's Spill Hotline (518-457-7362) within two hours, contain the spill, and begin corrective action in accordance with the requirements of Subpart 613-6 of this Part except if the spill meets the following conditions:

(i) It 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 land or waters of the State;  
and

(iv) It is cleaned up in accordance with the requirements of Subpart 613-6 of this Part within two hours of discovery.

(2) Facilities must immediately discontinue operation of any leaking AST or associated equipment and temporarily close the AST system pursuant to provisions of section 613-4.5(a) of this Part.

613-4.5 Out-of-Service AST Systems and Closure

(a) *Temporarily out-of-service.*

(1) When an AST system is temporarily out-of-service, the facility must continue operation and maintenance of corrosion protection in accordance with section 613-4.2(b) of this Part, and leak detection in accordance with section 613-4.3 of this Part. Subpart 613-6 of this Part must be complied with if a release is confirmed. However, leak detection is not required as long as the AST system is empty. The AST system is considered empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue remain in the system.

(2) When an AST system is temporarily closed for three months or more, the facility must also comply with the following requirements:

(i) Leave vent lines open and functioning; and

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

(b) *Permanent closure.*

(1) At least 30 days before beginning permanent closure, a facility must notify the Department of its intent to permanently close, unless such action is in response to corrective action.

(2) To permanently close a tank, the facility must empty and clean it by removing all liquids, vapors, and accumulated sludge.

(3) Every tank permanently closed must, if not removed, be stenciled with the date of permanent closure.

(4) Tanks that are permanently closed that remain at the facility must be protected from flotation. One of the following codes of practice (refer to section 613-1.10 of this Part for complete citation of references) must be adhered to in order to comply with this subdivision:

(i) API Standard 2015, August 2001;

(ii) API RP 2016, August 2001; or

(iii) NFPA 326, 2010 edition.

**Subpart 613-5 Delivery Prohibition**

613-5.1 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 affix a tag on the fill pipe of the relevant tank system.

(2) At the time that it affixes a tag, the Department will provide to the facility operator, if one is present, a written notification of the imposition of the delivery prohibition that will include the finding of the relevant condition(s) at the facility. The Department will then send the written notification to the facility via certified mail to the correspondence address listed in the current facility registration or license within five business days following the time that the tag is affixed to the tank system.

(3) The following are Tier 1 conditions:

(i) A tank system is known to be releasing petroleum. If the source of

the release cannot be determined upon inspection, then all tank systems at the facility that are probable sources of the release will be tagged.

(ii) A UST system regulated under Subpart 613-2 of this Part does not have one or more of the following:

(a) secondary containment equipment required under sections 613-2.1(b)(1)(iv) and 613-2.1(b)(2)(iii) of this Part;

(b) spill and overflow prevention required under section 613-2.1(b)(3) of this Part;

(c) corrosion protection required under sections 613-2.1(b)(1)(ii), 613-2.1(b)(2)(ii), 613-2.1(c)(2)(ii), 613-2.1(c)(2)(iii), or 613-2.1(c)(3) of this Part; or

(d) leak detection required under section 613-2.3(a) of this Part.

(b) *Tier 2 conditions.*

(1) When the Department finds that a Tier 2 condition exists at a facility, the Department may affix a tag on the fill pipe of the relevant tank system.

(2) Prior to affixing a tag, the Department will send a written statement to the facility informing the facility of the relevant condition(s). The Department will send the statement via certified mail to the correspondence address listed in the current facility registration or license.

(3) At the time that it affixes a tag, the Department will provide to the facility operator, if one is present, a written notification of the imposition of the delivery prohibition that will include the finding of the relevant condition(s) at the facility. The Department will then send the written notification to the facility via certified mail to the correspondence address listed in the current facility registration or license within five business days following the time that the tag is affixed to the tank system.

(4) The following are Tier 2 conditions:

(i) The results of leak detection required by sections 613-2.3(a) and (b) of this Part, sections 613-3.3(a) and (b) of this Part, or sections 613-4.3(a) and (b) of this Part indicate that the tank system may be leaking petroleum or would not contain a leak if one were to occur, unless the facility submits, within ten-days after receipt of the notification issued under paragraph (b)(2) of this section, acceptable documentation to the Department that demonstrates that the relevant tank system is not leaking or has been appropriately repaired.

(ii) With respect to the operation of a UST system regulated under

Subpart 613-2 of this Part, the facility has not demonstrated within 30 days following receipt of the Department's statement issued pursuant to section 613-5.1(b)(2) of this Part compliance with the following standards:

(a) spill and overfill prevention operating standards under section 613-2.2(a) of this Part;

(b) corrosion protection standards under section 613-2.2(b) of this Part; or

(c) leak detection operating standards under section 613-2.3(b) of this Part.

(iii) With respect to the operation of a UST system regulated under Subpart 613-3 of this Part, one or more of the following is missing and the facility has not documented to the Department that the missing component has been put in place within 30 days after receipt of the Department's statement issued pursuant to section 613-5.1(b)(2) of this Part:

(a) spill and overfill prevention required under section 613-3.1(b)(3) of this Part;

(b) corrosion protection required under sections 613-3.1(b)(1)(ii) and 613-3.1(b)(2)(ii) of this Part; or

(c) leak detection required under section 613-3.3(a) of this Part.

(iv) With respect to the operation of an AST system regulated under Subpart 613-4 of this Part, one or more of the following is missing and the facility has not documented to the Department that the missing component has been put in place within 30 days after receipt of the Department's statement issued pursuant to section 613-5.1(b)(2) of this Part:

(a) spill and overfill prevention required under section 613-4.2(a) of this Part;

(b) corrosion protection required under section 613-4.2(b) of this Part; or

(c) leak detection required under section 613-4.3 of this Part.

(c) Unless the continued operation of a tank system endangers public health, safety, or the environment, the Department may issue the written finding, consistent with sections 613-5.1(a)(2) or 613-5.1(b)(3) of this Part, that a Tier 1 or Tier 2 condition exists, but withhold the imposition of the delivery prohibition for a period that may not exceed 180 days, where there is no evidence that the tank system is leaking and imposing the delivery prohibition would jeopardize public access to fuel in a rural and remote area.

## 613-5.2 Prohibitions

(a) *Delivery prohibition.* No person may deliver or cause the delivery of petroleum to any tank system to which a tag is affixed or accept petroleum at such a tank system.

(b) *Tag tampering and removal prohibition.* Unless authorized by the Department, no person may tamper with or remove a tag affixed to a tank system or cause such tampering or removal.

## 613-5.3 Notifications

(a) *Notice of delivery prohibition to facility and carrier.* The presence of a tag affixed to the fill pipe of a tank system constitutes notice of the delivery prohibition.

(b) *Notification to carrier by facility.* After the Department affixes a tag to the fill pipe of a tank system, the facility must, prior to the next scheduled delivery of petroleum, inform all carriers that normally deliver to the tank system that delivery is prohibited. The facility must retain a record of any correspondence regarding the delivery prohibition.

## 613-5.4 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 to the facility confirming that the prohibition has been terminated. The Department will send the notification via certified mail to the correspondence address listed in the current facility registration or license.

(2) Review of compliance submissions.

(i) A facility may, at any time, submit information to the Department's designated individual demonstrating that the facility is in compliance or has corrected the condition(s) that prompted the Department to impose the prohibition.

(ii) Upon submission of information to the Department, the Department will 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 has been affixed to a tank fill port, the Department will provide the facility with an opportunity to present proof on the limited issue of whether the Department incorrectly determined that any Tier 1 or Tier 2 conditions existed at the facility. Notice of such hearing will be sent together with the written notification of any delivery prohibition issued pursuant to sections 613-5.1(a)(2) or (3) of this Part.

(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. The hearing officer will cause a typed transcript of the record to be prepared for the Department's files, but will not wait for the preparation of this transcript before making a report to the Commissioner, if so requested by the facility or the Commissioner.

(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, or authorize the removal of, the tag.

## **Subpart 613-6 Release Response and Corrective Action**

### 613-6.1 General

A facility must, in response to a release from a tank system, comply with the requirements of this section.

### 613-6.2 Initial Response

In response to a release from a tank system, a facility must immediately perform the following initial response actions:

- (a) Identify and mitigate fire, explosion, and vapor hazards;
- (b) Take immediate action to prevent any further release of petroleum into the environment; and
- (c) Report the release to Department's Spill Hotline (518-457-7362) within two hours.

### 613-6.3 Initial Abatement Measures and Site Check

(a) Unless directed to do otherwise by the Department, the facility must perform the following abatement measures:

- (1) Remove as much of the petroleum from the tank system as is necessary 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 sections 613-2.4(c)(2), 613-3.4(c)(2), or 613-4.4(c)(2) of this Part, or the closure site assessment of section 613-2.6(c) 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 613-6.5 of this Part.

(b) Within 20 days after release confirmation, a facility must submit a report to the Department summarizing the initial abatement steps taken under this subdivision and any resulting information or data.

#### 613-6.4 Initial Site Characterization

(a) Unless directed to do otherwise by the Department, a 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 613-6.3 of this Part. 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 sections 613-2.4(c)(2), 613-3.4(c)(2), or 613-4.4(c)(2) of this Part; and

(4) Results of the free product investigations required under section 613-6.3(a)(3) of this Part, to be used by a facility to determine whether free product must be recovered under section 613-6.5 of this Part.

(b) Within 45 days of release confirmation or another reasonable period of time determined by the Department, a facility must submit the information collected in compliance with this subdivision 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.

#### 613-6.5 Free Product Removal

At facilities where investigations under section 613-6.3(a)(4) of this Part indicate 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.

#### 613-6.6 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 613-2.4(b) of this Part;

(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 613-6.2 through 6.4 of this Part); 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) A facility must submit the information collected under this subdivision as soon as practicable or in accordance with a schedule established by the Department.

#### 613-6.7 Corrective Action Plan

(a) At any point after reviewing the information submitted in compliance with sections 613-6.2 through 6.4 of this Part, 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 613-6.2 through 6.4 of this Part, 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 their 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 should 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 section 613-6.7 of this Part.

(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. They 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 their 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.

#### 613-6.8 Public Participation

(a) For each confirmed release that requires a corrective action plan, the Department will require opportunity for public involvement by means designed to reach 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 require that public notice that complies with subdivision (a) of this section be given 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.