TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 5 PETROLEUM STORAGE TANKS
PART 106 NEW AND UPGRADED UNDERGROUND STORAGE TANK SYSTEMS: DESIGN, CONSTRUCTION, AND INSTALLATION

20.5.106.1 ISSUING AGENCY: New Mexico Environmental Improvement Board.
[20.5.106.1 NMAC - N, 07/24/2018]

20.5.106.2 SCOPE: This part applies to owners and operators of storage tanks as provided in 20.5.101 NMAC. If the owner and operator of a storage tank are separate persons, only one person is required to comply with the requirements of this part, including any notice and reporting requirements; however, both parties are liable in the event of noncompliance.
[20.5.106.2 NMAC - N, 07/24/2018]

20.5.106.3 STATUTORY AUTHORITY: This part is promulgated pursuant to the provisions of the Hazardous Waste Act, Sections 74-4-1 through 74-4-14 NMSA 1978, and the general provisions of the Environmental Improvement Act, Sections 74-1-1 through 74-1-17 NMSA 1978.
[20.5.106.3 NMAC - N, 07/24/2018]

20.5.106.4 DURATION: Permanent.
[20.5.106.4 NMAC - N, 07/24/2018]

20.5.106.5 EFFECTIVE DATE: July 24, 2018, unless a later date is indicated in the bracketed history note at the end of a section.
[20.5.106.5 NMAC - N, 07/24/2018]

20.5.106.6 OBJECTIVE: The purpose of 20.5.106 NMAC is to set forth the requirements for the design, construction, installation and upgrading of underground storage tank systems in a manner that will prevent releases and to protect the public health, safety and welfare and the environment of the state.
[20.5.106.6 NMAC - N, 07/24/2018]

20.5.106.7 DEFINITIONS: The definitions in 20.5.101 NMAC apply to this part.
[20.5.106.7 NMAC - N, 07/24/2018]

20.5.106.8 to 20.5.106.599 [**RESERVED**]

20.5.106.600 GENERAL PERFORMANCE STANDARDS FOR UST SYSTEMS:

A. In order to prevent releases due to structural failure, corrosion or spills and overfills for as long as a UST system is used to store regulated substances, owners and operators of any UST system shall:

(1) properly design, construct, and initially test each new UST system;

(2) provide project drawings to the bureau 30 days prior to installation; and

(3) ensure that any portion of a UST system that routinely contains regulated substances and is in contact with the ground, water, or other electrolyte shall be protected from corrosion, in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department.

B. Owners and operators shall ensure that the entire UST system is compatible with any regulated substance conveyed, as required by 20.5.107.708 NMAC.

C. Tanks and piping installed or replaced after April 4, 2008 must be secondarily contained in accordance with 20.5.106.606 NMAC and use interstitial monitoring in accordance with 20.5.108.808 NMAC, 20.5.108.811 NMAC, and 20.5.108.813 NMAC, except for suction piping that meets the requirements of Subsection B of 20.5.108.813 NMAC.

D. Secondary containment must be able to contain regulated substances leaked from the primary containment until they are detected and removed and prevent the release of regulated substances to the environment at any time during the operational life of the UST.
[20.5.106.600 NMAC - N, 07/24/2018]

20.5.106.601 PERFORMANCE STANDARDS FOR FIBERGLASS-REINFORCED PLASTIC USTS: If a UST is constructed of fiberglass-reinforced plastic, owners and operators shall comply with the requirements of the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department. Owners and operators shall use one or more of the following to comply with the requirements of this section:

A. *Underwriters Laboratories Standard 1316, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures"*; or

B. *Underwriters' Laboratories of Canada Standard 615, "Standard for Fibre Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids"*.

[20.5.106.601 NMAC - N, 07/24/2018]

20.5.106.602 PERFORMANCE STANDARDS FOR STEEL USTS:

A. Owners and operators shall cathodically protect steel USTs by:

(1) coating the tank with a suitable dielectric material;

(2) ensuring that field-installed cathodic protection systems are designed by a corrosion expert;

(3) designing and installing impressed current or galvanic systems to allow ready determination of current operating status as required in Subsection C of 20.5.107.705 NMAC; and

(4) operating and maintaining cathodic protection systems in accordance with 20.5.107 NMAC.

B. If a UST is constructed of steel, owners and operators shall comply with the requirements of the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department. Owners and operators shall use one or more of the following to comply with the applicable requirements of this section:

(1) *Steel Tank Institute, "STI-P3 Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks"*;

(2) *Underwriters Laboratories Standard 1746, "Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks"*;

(3) *Underwriters Laboratories of Canada Standard 603, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids"*;

(4) *Underwriters Laboratories of Canada Standard 603.1, "External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids"*;

(5) *Underwriters' Laboratories of Canada S631, "Standard for Isolating Bushings for Steel Underground Tanks Protected with External Corrosion Protection Systems";*

(6) *NACE International Standard Practice SP0285, "External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection"*;

(7) *Steel Tank Institute Standard F841, "Standard for Dual Wall Underground Steel Storage Tanks"*; or

(8) *Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids"*.

[20.5.106.602 NMAC - N, 07/24/2018]

20.5.106.603 PERFORMANCE STANDARDS FOR USTS CONSTRUCTED OF STEEL AND CLAD OR JACKETED WITH A NON-CORRODIBLE MATERIAL: If a UST is constructed of steel and clad or jacketed with a non-corrodible material, owners and operators shall meet the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department. Owners and operators shall use one or more of the following to comply with the requirements of this section:

A. *Underwriters Laboratories Standard 1746, "Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks"*;

B. *Steel Tank Institute ACT-100® Specification F894, "Specification for External Corrosion Protection of FRP Composite Steel Underground Storage Tanks"*;

C. *Steel Tank Institute ACT-100-U® Specification F961, "Specification for External Corrosion Protection of Composite Steel Underground Storage Tanks"*; or

D. *Steel Tank Institute Specification F922, "Specification for Permatank®"*.

[20.5.106.603 NMAC - N, 07/24/2018]

20.5.106.604 PERFORMANCE STANDARDS FOR METAL USTS WITHOUT CORROSION PROTECTION: If a UST is constructed of metal without additional corrosion protection measures, owners and operators shall only install the tank at a site that is approved in writing in advance of installation by a corrosion expert not to be corrosive enough to cause the UST to have a release due to corrosion during its operational life. Owners and operators shall maintain records that demonstrate compliance with this paragraph for the remaining life of the tank.
[20.5.106.604 NMAC - N, 07/24/2018]

20.5.106.605 INSTALLATION OF UST SYSTEMS:

A. Owners and operators shall properly install all USTs and piping:

(1) in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department; and

(2) in accordance with the manufacturer's instructions.

B. Owners and operators shall use one or more of the following to comply with the requirements of this section:

(1) *American Petroleum Institute RP 1615, "Installation of Underground Hazardous Substances or Petroleum Storage Systems"*;

(2) *Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"*; or

(3) *National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"* and *Standard 30A, "Code for Motor Fuel Dispensing Facilities and Repair Garages"*.
[20.5.106.605 NMAC - N, 07/24/2018]

20.5.106.606 SECONDARY CONTAINMENT FOR UST SYSTEMS:

A. Owners and operators shall install secondary containment as follows:

(1) for any new or replaced UST system;

(2) for any new or replaced dispenser system. A dispenser system is considered replaced when both the dispenser and the equipment needed to connect the dispenser to the underground storage tank system are installed at a UST facility. The equipment necessary to connect the dispenser to the underground storage tank system includes check valves, shear valves, unburied risers or flexible connectors, or other transitional components that are underneath the dispenser and connect the dispenser to the underground piping. Under-dispenser containment shall allow for access to the components in the containment system for visual inspections; and

(3) for any UST piping replaced after April 4, 2008.

B. Owners and operators shall design, provide project drawings for, and construct the entire new UST system with the secondary containment system in compliance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory. The project drawings shall be approved in advance by the department. The secondary containment system shall:

(1) include all tanks, piping, dispenser systems, and all containment sumps for any piping and ancillary equipment that routinely contains regulated substances;

(2) include containment sumps, including under-dispenser containment, transition sumps, and containment sumps for submersible turbine pumps, that are liquid-tight on their sides, bottoms, and at any penetrations; and

(3) be interstitially monitored in accordance with the requirements in 20.5.108 NMAC.

C. If owners and operators:

(1) replace a UST, they shall install a double-walled tank with an inner and outer barrier and a release detection system that meets the requirements of 20.5.108 NMAC;

(2) replace a dispenser system, they shall install, in accordance with manufacturer's recommendations, an under-dispenser containment system that shall be hydrostatically tested and approved by the department prior to use; types of under-dispenser containment systems include, but are not limited to, dispenser liners, containment sumps, dispenser pans and dispenser sump liners; or

(3) replace piping, they shall install only double-walled piping with an inner and outer barrier and a release detection system that meets the requirements of 20.5.108 NMAC for the replaced piping.

D. Owners and operators shall use one or more of the following to comply with secondary containment requirements:

(1) *Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"*;

(2) *American Petroleum Institute RP 1615, "Installation of Underground Hazardous Substances or Petroleum Storage Systems"*;

(3) *National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"*; or

(4) *National Fire Protection Association Standard 30A, "Code for Motor Fuel Dispensing Facilities and Repair Garages"*.

E. The secondary containment requirements of this section shall not apply to:

(1) existing USTs in a manifolded system (as secondary containment is only required for a new or replaced UST in a manifolded system);

(2) repairs meant to restore a UST, piping or dispenser system to operating condition;

(3) piping runs that are not new or replaced for USTs with multiple piping runs;

(4) suction piping that meets the requirements of Subsection B of 20.5.108.813 NMAC; and

(5) non-pressurized piping that manifolds two or more underground tanks together, such as a siphon piping system;

[20.5.106.606 NMAC - N, 07/24/2018]

20.5.106.607 PERFORMANCE STANDARDS FOR EXISTING UST SYSTEMS:

A. All existing UST systems (installed on or before December 22, 1988), by the effective date of these regulations, must have complied with one of the following requirements:

(1) new UST performance standards in 20.5.106 NMAC;

(2) upgrade requirements in Subsection B of 20.5.106.607 NMAC; or

(3) closure requirements in 20.5.115 NMAC.

B. UST upgrading requirements. Owners and operators must have upgraded existing steel USTs by the effective date of these regulations to meet one of the following requirements in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department. Steel USTs that have not been upgraded by the effective date of these regulations shall be immediately permanently closed in accordance with 20.5.115 NMAC.

(1) Internal lining.

(a) USTs upgraded by internal lining must meet the following:

(i) the lining was installed in accordance with an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory that was approved in advance by the department, and

(ii) within 10 years after installation of internal lining and every five years thereafter, the lined UST is required to be internally inspected in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory, or manufacturer's recommendation, approved in advance by the department.

(b) One of the following shall be used to comply with internal lining upgrading requirements:

(i) *National Leak Prevention Association Standard 631, Chapter B, "Future Internal Inspection Requirements for Lined Tanks"*;

(ii) *American Petroleum Institute Recommended Practice 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks"*; or

(iii) *Ken Wilcox Associates Recommended Practice, "Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera"*.

(c) Owners and operators shall permanently close USTs in accordance with the requirements of 20.5.115 NMAC if the internal lining is not performing in accordance with the original design specifications and cannot be repaired in accordance with one of the following codes:

(i) *National Fire Protection* Association *Standard 30, "Flammable and Combustible Liquids Code";*

(ii) *American Petroleum Institute Recommended Practice RP 2200, "Repairing Hazardous Liquid Pipelines"*;

(iii) *American Petroleum Institute Recommended Practice RP 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks"*;

(iv) *National Fire Protection Association Standard 326, "Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair"* or;

(v) *National Leak Prevention Association Standard 631, Chapter A, "Entry, Cleaning, Interior Inspection, Repair, and Lining of Underground Storage Tanks"*.

(2) Cathodic protection. USTs upgraded by cathodic protection shall meet the requirements of 20.5.106.602 NMAC and owners and operators must have ensured the integrity of the tank by:

(a) performing internal inspections and assessments to ensure that the tank was structurally sound and free of corrosion holes prior to installing the cathodic protection system; or

(b) if the tank had been installed for less than 10 years, by either having monitored monthly for releases in accordance with 20.5.108 NMAC or by having assessed for corrosion holes by conducting two tightness tests that met the requirements of 20.5.108 NMAC and that were approved in advance by the department. Owners and operators must have conducted the first tightness test prior to installing the cathodic protection system. Owners and operators must have conducted the second tightness test between three and six months following the first operation of the cathodic protection system.

(c) Owners and operators shall use one or more of the following to comply with cathodic protection upgrade requirements:

(i) *Steel Tank Institute Recommended Practice R972, "Recommended Practice for the Addition of Supplemental Anodes to STI-P3® USTs"*;

(ii) *NACE International Standard Practice SP0285, "External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection"*; or

(iii) *American Petroleum Institute Publication RP 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"*.

(3) Internal lining combined with cathodic protection. USTs upgraded by internal lining combined with cathodic protection must have met the following:

(a) the lining was installed in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory, as follows:

(i) *National Leak Prevention Association Standard 631, Chapter B, "Future Internal Inspection Requirements for Lined Tanks"*;

(ii) *American Petroleum Institute Recommended Practice 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks"*;

(iii) *National Fire Protection Association Standard 326, "Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair"*, or

(iv) *National Leak Prevention Association Standard 631, Chapter A, "Entry, Cleaning, Interior Inspection, Repair, and Lining of Underground Storage Tanks"*; and

(b) the cathodic protection meets the requirements of 20.5.106.602 NMAC and has complied with one of the following:

(i) *Steel Tank Institute Recommended Practice R972, "Recommended Practice for the Addition of Supplemental Anodes to STI-P3®USTs"*; or

(ii) *NACE International Standard Practice SP0285, "External Control of Underground Storage Tank Systems by Cathodic Protection"*; or

(iii) *American Petroleum Institute Publication RP 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"*.

C. Piping upgrade requirements. Owners and operators shall cathodically protect and upgrade metal piping in existing UST systems that routinely contain regulated substances and are in contact with an electrolyte, such as soil, to meet the requirements of 20.5.106.609 NMAC or 20.5.106.610 NMAC.

D. Spill and overfill prevention equipment. Owners and operators shall comply with the spill and overfill prevention requirements in 20.5.106.613 NMAC. Owners and operators of existing UST systems who installed oil/water separators to meet spill prevention requirements shall discontinue their use in meeting these requirements and shall install new spill prevention equipment that meets the requirements in Subsection F of 20.5.106.613 NMAC no later than three years after the effective date of these regulations.

E. Owners and operators of existing fiberglass reinforced plastic UST systems may install an internal lining in order to address compatibility issues in accordance with *Fiberglass Tank and Pipe Institute Recommended Practice T-95-1, "Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks"*.

[20.5.106.607 NMAC - N, 07/24/2018]

20.5.106.608 GENERAL PERFORMANCE STANDARDS FOR PIPING:

A. Owners and operators shall properly design and construct new piping, provide project drawings, initially test piping, and ensure that any steel portion of piping that routinely contains regulated substances and is in contact with an electrolyte, such as soil or water, shall be protected from corrosion, in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department. Owners and operators shall use one or more of the following to comply with the requirements of this section:

(1) third party certification from a nationally recognized laboratory;

(2) *American Society of Mechanical Engineering Standard B31.3, "Process Piping"*;

(3) *American Society of Testing and Materials A53, "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless"*;

(4) *American Society of Testing and Materials A106, "Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service"*; or

(5) *American Society of Testing and Materials A135, "Standard Specification for Electric-Resistance-Welded Steel Pipe"*.

B. Owners and operators shall ensure that piping is compatible with any regulated substance conveyed in accordance with 20.5.107.708 NMAC.

C. Owners and operators shall protect all piping from impact, settlement, vibration, expansion, corrosion, and damage by fire.

D. Owners and operators shall install a containment sump at any point where piping transitions from above the surface of the ground to below the ground surface.

E. If owners and operators install more than one type of piping at an underground storage tank system, then owners and operators shall comply with the requirements applicable to each type of piping for that run of piping.

[20.5.106.608 NMAC - N, 07/24/2018]

20.5.106.609 PERFORMANCE STANDARDS FOR PIPING CONSTRUCTED OF NON-CORRODIBLE MATERIAL:

A. If owners and operators construct or operate piping of fiberglass-reinforced plastic or flexible piping, the piping shall:

(1) be completely underground;

(2) be within secondary containment that includes a release detection system that meets the requirements of 20.5.108 NMAC;

(3) have a suitable cover approved by the piping manufacturer; or

(4) have equivalent protection approved by the piping manufacturer and approved by the department prior to installation.

B. Owners and operators shall ensure that the piping meets the requirements of the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department, and that the piping is approved by the manufacturer for the application for which it is to be used. Owners and operators shall use one or more of the following to comply with the requirements of this section:

(1) *Underwriters Laboratories Standard 971, "Standard for Nonmetallic Underground Piping for Flammable Liquids"*; or

(2) *Underwriters Laboratories of Canada Standard S660, "Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids"*.

[20.5.106.609 NMAC - N, 07/24/2018]

20.5.106.610 PERFORMANCE STANDARDS FOR STEEL PIPING FOR UST SYSTEMS:

A. If owners and operators construct or operate piping of steel for a UST system, owners and operators shall:

(1) coat the piping with a suitable dielectric material;

(2) field-install a cathodic protection system designed by a corrosion expert; and

(3) design any impressed current system to allow ready determination of current operating status as required in Subsection C of 20.5.107.705 NMAC.

B. Owners and operators shall ensure that the piping meets the requirements of the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing

laboratory approved in advance by the department, and that the piping is approved by the manufacturer for the application for which it is to be used. Owners and operators shall use one or more of the following to comply with the requirements of this section:

(1) *American Petroleum Institute Recommended Practice 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"*;

(2) *Underwriters Laboratories Subject 971A, "Outline of Investigation for Metallic Underground Fuel Pipe"*;

(3) *Steel Tank Institute Recommended Practice R892, "Recommended Practice for Corrosion Protection of Underground Piping Networks Associated with Liquid Storage and Dispensing Systems"*;

(4) *NACE International Standard Practice SP0169, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems"*; or

(5) *NACE International Standard Practice SP0285, "External Corrosion Control of Underground Storage Tank Systems by Cathodic Protection"*.

C. If owners and operators construct piping of steel for a UST system without additional corrosion protection measures, owners and operators shall only install the piping at a site that is approved, in writing, in advance of installation, by a corrosion expert, to not be corrosive enough to cause the piping to have a release due to corrosion during its operational life. Owners and operators shall maintain records that demonstrate compliance with this requirement for the remaining life of the piping.

D. If owners and operators install or operate steel piping above ground that connects to an emergency generator or loading rack, they shall:

(1) meet the requirements in Subsection D of 20.5.106.608 NMAC;

(2) meet the requirements in Subsection A of 20.5.106.610 NMAC; and

(3) meet the requirements in 20.5.109.915 NMAC for the above ground steel portion of the piping.

[20.5.106.610 NMAC - N, 07/24/2018]

20.5.106.611 UNDERGROUND STORAGE TANK SYSTEMS AT MARINAS:

A. Owners and operators of underground storage tank systems at marinas shall install an automatic break-away device to shut off flow of fuel from on-shore piping, which shall be located at the connection of the on-shore piping and the piping leading to the dock. Owners and operators shall install another automatic break-away device to shut off flow of fuel located at any connection between flexible piping and hard piping on the dispenser system and dock. The automatic break-away devices shall be easily accessible, and their location shall be clearly marked.

B. Owners and operators of underground storage tank systems at marinas shall electrically isolate dock piping where excessive stray electrical currents are encountered.

C. Owners and operators of underground storage tank systems at marinas shall protect piping from stress due to tidal action.

D. Owners and operators shall use *Petroleum Equipment Institute Publication RP1000, "Recommended Practices for the Installation of Marina Fueling Systems"*, or, if applicable, the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department.

[20.5.106.611 NMAC - N, 07/24/2018]

20.5.106.612 VENTING FOR UNDERGROUND STORAGE TANK SYSTEMS:

A. Owners and operators shall design and construct venting for all underground storage tank systems, following the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department.

B. Vent pipes that are provided for normal tank venting shall be located so that the discharge point is outside of buildings higher than the fill pipe opening. Vent pipes shall be installed not less than 15 feet from power ventilation air intake devices and not less than five feet from a building opening. Vent outlets and devices shall be designed and installed to minimize blockage.

C. Types of vent pipes.

(1) Vent pipes that are provided for normal tank venting shall extend at least 12 feet above ground level.

(2) If attached to a structure, vent pipes shall extend at least 5 feet above the highest projection of the canopy or roof.

(3) Vent pipes for normal tank venting shall be of appropriate size for the capacity and operating conditions of the tank.

D. Owners and operators shall use one of more of the following to comply with the requirements of this section:

(1) *Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"*;

(2) *National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"*;

(3) *National Fire Protection Association Standard 30A, "Code for Motor Fuel Dispensing Facilities and Repair Garages"*;

(4) *Underwriters Laboratories Standard 142, "Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids"*; or

(5) *International Code Council, "International Fire Code"*.

[20.5.106.612 NMAC - N, 07/24/2018]

20.5.106.613 SPILL AND OVERFILL PREVENTION:

A. Except as provided in subsection B of this section, to prevent spilling and overfilling associated with transfers of regulated substances to underground storage tank systems, owners and operators shall use the following spill and overfill prevention equipment:

(1) spill prevention equipment that will prevent release of regulated substances to the environment when the transfer hose is detached from the fill pipe; and

(2) overfill prevention equipment for USTs that will:

(a) automatically shut off flow into the tank when the tank is no more than ninety-five percent full; or

(b) alert the transfer operator when the tank is no more than ninety percent full by restricting the flow into the tank or triggering a high-level audible alarm.

B. Owners and operators are not required to use the spill and overfill prevention equipment specified in Subsection A of this section if approved in writing in advance by the department where:

(1) alternative equipment is used that is determined by the department to be no less protective of public health, safety and welfare and the environment than the equipment specified in Paragraphs (1) and (2) of Subsection A of this section; or

(2) the underground storage tank system is filled by transfers of no more than 25 gallons at one time;

C. Flow restrictors or ball float valves used in vent lines shall not be used as overfill prevention equipment for USTs when overfill prevention is installed or replaced after[the effective date of these rules.

D. Spill and overfill prevention equipment must be periodically tested or inspected in accordance with 20.5.107.704 NMAC.

E. Owners and operators of UST systems with remote fill piping shall install a trap door or equivalent device and shall meet the following:

(1) Flow restrictors or ball float valves shall not be installed or used on a UST system with a remote fill pipe.

(2) Owners and operators who install or modify remote fill piping shall install a containment sump where remote fill piping connects to the UST.

F. Overfill prevention and spill prevention equipment for new UST systems shall be either listed in accordance with an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory for use with flammable and combustible liquids.

G. Owners and operators shall not install oil/water separators to meet spill prevention requirements for UST systems.

[20.5.106.613 NMAC - N, 07/24/2018]

20.5.106.614 LOADING RACKS:

A. Owners and operators who install loading racks shall design and construct them in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department. Owners and operators shall use one or more of the following to comply with the requirements in this section:

(1) *American Petroleum Institute Standard 2610, "Design, Construction, Operation, Maintenance & Inspection of Terminal and Tank Facilities"*;

(2) *National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"*;

(3) *International Code Council, "International Fire Code"*; or

(4) *Petroleum Equipment Institute RP 800, "Recommended Practices for Installation of Bulk Storage Plants.*"

B. Owners and operators of aviation fuel storage tank systems who install loading racks shall comply with *National Fire Protection Association Standard 407, "Standard for Aircraft Fuel Servicing"*.

C. Owners and operators shall install a containment system that is designed to contain all releases of regulated substances that occur during loading and unloading operations at the loading rack. For all loading racks, owners and operators shall install either:

(1) a drainage system, or secondary containment system meeting the requirements of 20.5.106 NMAC, with a catchment basin capable of containing the largest compartment of a tank car or tanker truck that is loaded or unloaded at the facility; or

(2) a drainage system that is connected to a treatment facility designed to receive releases of regulated substances that occur during loading and unloading operations.

D. Owners and operators shall ensure that loading racks are at least 25 feet from ASTs containing class I liquids (such as gasoline), buildings, and property lines. Owners and operators shall ensure that loading racks are at least 15 feet from ASTs containing class II or class III liquids.

[20.5.106.614 NMAC - N, 07/24/2018]

20.5.106.615 REQUIRED NOTIFICATION PRIOR TO INSTALLATION: To ensure that an inspector has an opportunity to be present during the steps in procedures which are important to the prevention of releases, owners, operators, and certified tank installers shall give the department notice of the dates on which critical junctures in the installation of an underground storage tank system are to take place. The inspector may require that critical junctures be performed from Monday through Friday during regular business hours.

A. For installations, the term "critical junctures" means:

(1) preparation of the excavation immediately prior to receiving backfill and a UST or piping for a UST;

(2) installation of any tank pad, vault, or secondary containment for a storage tank system;

(3) setting of a storage tank and piping, including placement of any anchoring devices, backfill to the level of the tank, and strapping, if any;

(4) placing a regulated substance in the tank;

(5) any time during the installation in which components of piping are connected;

(6) all pressure testing or integrity testing of an underground storage tank system, including associated piping, performed during the installation; and

(7) completion of backfill and filling of the excavation.

B. Owners, operators and certified tank installers shall give at least 30 days written notice before the installation of an underground storage tank system. At a minimum, the installation notice shall contain the following information:

(1) date the form is completed;

(2) facility name, facility ID number, address (with county), and telephone number;

(3) owner name, owner ID number, address, and telephone number;

(4) contractor name, address, and telephone number;

(5) tank details (number and size, type and materials, products to be stored);

(6) piping material and type of leak detection;

(7) type of spill and overfill prevention;

(8) type of corrosion protection (sacrificial, impressed current, or none with explanation why corrosion protection not required);

(9) method of leak detection (statistical inventory reconciliation, automatic tank gauges, visual, vapor monitoring, interstitial monitoring, inventory control with tightness testing);

(10) approximate date installation will take place; and

(11) the signature of the owner or owner's representative filling out the form.

C. Owners, operators and certified tank installers shall provide required project drawings with the 30 day written notice.

D. In addition to the written notice described in this section, owners, operators and certified tank installers shall give oral notice at least 24 hours in advance of the commencement of the procedure. In the oral notice, owners, operators and certified tank installers shall describe any changes to the 30-day written notice required in Subsection B of this section, such as different equipment or installation methods.

E. If owners, operators and certified tank installers are separate persons, only one person is required to comply with the notice requirements of this section; however, all parties are liable in the event of noncompliance.
[20.5.106.615 NMAC - N, 07/24/2018]

[The department provides an optional form that may be used for notification of installation. The form is available on the petroleum storage tank bureau's pages on the department's website or by contacting the Petroleum Storage Tank Bureau at 505-476-4397 or 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico 87505.]

20.5.106.616 REQUIRED CERTIFICATIONS:

A. Certification of compliance. All owners and operators of new underground storage tank systems shall certify in the registration form required by 20.5.102 NMAC compliance with the following requirements:

(1) installation of tanks and piping in 20.5.106.605 NMAC for UST systems;

(2) cathodic protection of steel tanks and piping in 20.5.106.602 NMAC and 20.5.106.610 NMAC for UST systems, or 20.5.106.604 NMAC for UST systems;

(3) financial responsibility under 20.5.117 NMAC; and

(4) release detection in 20.5.108 NMAC.

B. Installer certification. All owners and operators of new underground storage tank systems shall ensure that the installer certifies in the registration form required by 20.5.102 NMAC that the methods used to install the storage tanks and piping comply with the requirements in 20.5.106 NMAC.

C. Certification of installation. Owners and operators shall demonstrate compliance with the installation standards in 20.5.106 NMAC. Owners and operators shall provide a certification of installation on the UST registration form required by 20.5.102 NMAC, which asserts that all of the following methods of certification, testing, and inspection were used to demonstrate compliance with installation requirements of the UST system:

(1) the installer has been certified by the tank and piping manufacturers;

(2) the installer has been certified or licensed as required in 20.5.105 NMAC; and

(3) the installer has notified, submitted required documentation to, and the installation has been inspected by the department; and

(4) all work listed in the manufacturer's installation checklists has been completed.
[20.5.106.616 NMAC - N, 07/24/2018]

20.5.106.617 ALTERNATE METHODS:

A. If owners and operators want to install tanks, piping, underground storage tank systems, spill and overfill equipment, secondary containment, or any other requirement of this part with materials or methods that are not in accordance with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory, owners and operators shall apply in writing to the department, shall provide supporting documentation, and shall not begin the installation unless and until the department approves the request in writing. At a minimum, the request for an alternate method shall contain the following:

(1) date the form is completed;

(2) facility name, facility ID number, address (with county) and telephone number;

(3) owner name, owner ID number, address and telephone number;

(4) citation to regulation for which alternate method or material (such as type of piping) is requested;

(5) brief description of the proposed alternate method or material;

(6) justification of proposed alternate method or material, including citation to a standard or code supporting its use, if available; and

(7) demonstration of its equivalent protection of public health, safety and welfare and the environment.

B. The department shall not grant the request unless owners and operators demonstrate that the request will provide equivalent protection of public health, safety and welfare and the environment.
[20.5.106.617 NMAC - N, 07/24/2018]

[The department provides an optional form that may be used to request approval of an alternate method. The form is available on the petroleum storage tank bureau's pages on the department's website or by contacting the Petroleum Storage Tank Bureau at 505-476-4397 or 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico 87505.]

HISTORY OF 20.5.106 NMAC:
Pre-NMAC History: The material in this part was derived from that previously filed with the commission of public records - state records center and archives.
EIB/USTR-4, Underground Storage Tank Regulations - Part IV - New and Upgraded UST Systems: Design, Construction, and Installation, filed 9/12/88
EIB/USTR-4, Underground Storage Tank Regulations - Part IV - New and Upgraded UST Systems: Design, Construction, and Installation, filed 8/4/89
EIB/USTR-4, Underground Storage Tank Regulations - Part IV - New and Upgraded UST Systems: Design, Construction, and Installation, filed 6/12/90

History of Repealed Material: 20 NMAC 5.4, Underground Storage Tanks, New and Upgraded UST Systems: Design, Construction, and Installation (filed 2/27/97), repealed 8/15/03.
20.5.4 NMAC, Petroleum Storage Tanks, New and Upgraded Tank Systems: Design, Construction and Installation (filed 7/16/03) repealed 4/4/08.
20.5.4 NMAC, Petroleum Storage Tanks, New and Upgraded Tank Systems: Design, Construction and Installation (filed 4/4/08) repealed 07/24/2018.

Other History:
EIB/USTR-4, Underground Storage Tank Regulations - Part IV - New and Upgraded UST Systems: Design, Construction, and Installation (filed 6/12/90), renumbered, reformatted and replaced by 20 NMAC 5.4, New and Upgraded UST Systems: Design, Construction, and Installation, effective 11/5/95.
20 NMAC 5.4, Underground Storage Tanks, New and Upgraded UST Systems: Design, Construction, and Installation (filed 10/6/95) replaced by 20 NMAC 5.4, New and Upgraded UST Systems: Design, Construction, and Installation, effective 4/1/97.
20 NMAC 5.4, Underground Storage Tanks, New and Upgraded UST Systems: Design, Construction, and Installation (filed 2/27/97) was renumbered, reformatted and replaced by 20.5.4 NMAC, New and Upgraded Tank Systems: Design, Construction and Installation, effective 08/15/03.
20.5.4 NMAC, Petroleum Storage Tanks, New and Upgraded Tank Systems: Design, Construction and Installation (filed 8/15/03) was replaced by 20.5.106 NMAC, Petroleum Storage Tanks, New and Upgraded Underground Storage Tank Systems: Design, Construction and Installation, effective 07/24/2018.