20.5.110.1 ISSUING AGENCY: New Mexico Environmental Improvement Board.

20.5.110.2 SCOPE: This part applies to owners and operators of above ground 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.

20.5.110.3 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.

20.5.110.4 DURATION: Permanent.

20.5.110.5 EFFECTIVE DATE: July 24, 2018 unless a later date is indicated in the bracketed history note at the end of a section.

20.5.110.6 OBJECTIVE: The purpose of 20.5.110 NMAC is to ensure that the operation and maintenance of above ground storage tanks will prevent releases and to protect the public health, safety and welfare and the environment of the state.

20.5.110.7 DEFINITIONS: The definitions in 20.5.101 NMAC apply to this part.

20.5.110.1000 OPERATION AND MAINTENANCE OF ABOVE GROUND STORAGE TANK SYSTEMS: Owners and operators shall properly maintain all tanks, piping, secondary containment and other associated equipment required in 20.5.109 NMAC, and shall ensure that all tanks, piping, secondary containment and other associated equipment for all storage tank systems are fully operational at all times. Owners and operators shall notify the department in accordance with 20.5.118 NMAC if a visual inspection, other inspection or testing conducted in accordance with 20.5.110 NMAC or 20.5.111 NMAC indicates that a release may have occurred.

A. Owners and operators shall visually inspect monthly an AST and all its components that are readily accessible to visual inspection.

B. Owners and operators shall maintain the exterior coating of an AST and ancillary equipment not in contact with soil 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. The following may be used to comply with this requirement:

1. Society of Protective Coatings SSPC-PA 1, “Shop, Field, and Maintenance Painting of Steel”;

20.5.110 NMAC
C. Owners and operators shall mark fill port lids and label the tanks of ASTs as to the regulated substance stored 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. The following shall be used to comply with this requirement: *American Petroleum Institute RP 1637, “Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals”*.

D. If any steel piping installed in a trench is used in an AST system, owners and operators shall visually inspect the trench monthly. Owners and operators shall draw off any liquid that has accumulated in the trench within one week of the accumulation, and shall remove any other debris that has accumulated inside the trench. Owners and operators shall properly treat and dispose of any accumulated liquid with a visible sheen and the disposal shall be in accordance with all federal, state, and local statutes, ordinances, and regulations. If a basin sump is located in the trench, owners and operators shall keep the basin sump free of accumulated liquid and debris. Owners and operators shall not install any valves in any basin sump in a piping trench.

E. Owners and operators shall check ASTs monthly for the presence of any accumulated liquids, other than the intended regulated substance. ASTs shall be checked at the lowest possible point inside the tank. Any accumulated liquid other than the intended regulated substance shall be removed to the extent technically possible. Owners and operators shall properly dispose of any liquid removed from an AST.

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20.5.110.1001 OPERATIONS AND MAINTENANCE PLAN: Owners and operators of all storage tank systems shall adopt and implement a written operations and maintenance plan, which they shall keep at the facility for the life of the storage tank system. Owners and operators of unmanned storage tank systems may keep the operations and maintenance plan at an alternate location as long as it is made readily available to the department upon request. The operations and maintenance plan shall be as specific as possible for each facility and shall include the piping and ancillary equipment that routinely contains regulated substances, or controls the flow of regulated substances. Owners and operators shall use, by reference, operational and maintenance guidance from the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory. Owners and operators who reference a current edition of an industry standard or code of practice shall maintain a copy of the code or standard they reference. Owners and operators shall not implement the plan until it has been approved by the department.

A. At a minimum, the operations and maintenance plan shall include the following:

1. a detailed plan showing inspections, operations, testing and maintenance to be done on a daily, monthly, quarterly and annual basis; the plan shall include a description of how owners and operators properly dispose of regulated substances spilled at the facility, and any water or soil removed from any part of the storage tank system where there is any indication it might be or have been contaminated with a regulated substance;
2. a description of periodic operation and maintenance walk-through inspections in accordance with 20.5.110.1008 NMAC; and
3. responses to emergency situations; this information shall be readily accessible at the facility; responses to emergency situations shall include the following:
   a. the location of equipment to be shut down during an emergency and how to safely perform these tasks;
   b. actions to be taken in the event of a fire, flooding, a spill, or a release of regulated substances;
   c. a site diagram; and
   d. a list of whom to notify or call during or after an emergency situation.

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

1. *American Petroleum Institute 570, “Piping Inspection Code: In-Service Inspection, Repair, and Alteration Piping Systems”*;
2. *American Petroleum Institute Standard 653, “Tank Inspection, Repair, Alteration, and Reconstruction”*; or
3. *Steel Tank Institute Standard SP001, “Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids”*;

C. Owners and operators may submit to the department for approval an alternate plan which contains all the information requested in this section.

D. Owners and operators of storage tank systems that have been placed in temporary closure in
compliance with 20.5.115.1501 NMAC shall not be required to have an operations and maintenance plan, unless one or both of the following conditions is present:

1. the storage tank contains greater than one inch of regulated substance; or
2. the storage tank system has steel components that are in contact with an electrolyte, such as soil, water or concrete.

[20.5.110.1001 NMAC - N, 07/24/2018]

20.5.110.1002 OPERATION, MAINTENANCE, REPAIR AND REPLACEMENT OF SECONDARY CONTAINMENT FOR ASTS:

A. Owners and operators shall operate, maintain and repair secondary containment 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 not store inside the secondary containment any material which is chemically reactive with the regulated substance stored in the AST system, or with the AST itself. Owners and operators shall not store any material in the secondary containment that reduces the capacity of the secondary containment below the requirements in 20.5.109.904 NMAC.

C. Owners and operators shall draw off any accumulation of liquid in the secondary containment, including all sumps, within one week of the accumulation, and shall remove any other debris that has accumulated inside the secondary containment. Owners and operators shall properly treat and dispose of any accumulated liquid with a visible sheen. If gravity drain valves are used to remove the accumulated liquid from the secondary containment, owners and operators shall keep all valves closed except during the process of draining the accumulated liquid.

D. In order to maintain the highest level of secondary containment in case of a discharge from, or an overfill of, an AST system, owners and operators shall keep the spill containment buckets, catchment basins, containment sumps, basin sumps, and piping trenches free of water, regulated substances and debris.

E. Owners and operators shall, 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:

1. maintain, repair and replace any concrete secondary containment systems; and
2. repair all significant cracks in the floors and walls of concrete secondary containment systems.

F. Owners and operators shall use one or more of the following to comply with the concrete secondary containment system repair requirements in Subsection E above:

2. American Concrete Institute 224R, “Control of Cracking in Concrete Structures”; or
3. American Concrete Institute “Concrete Repair Manual”.

G. Owners and operators shall maintain, repair and replace any geo-synthetic liner according to manufacturer’s instructions, which owners and operators shall keep readily available at the facility for the life of the liner.

H. Owners and operators shall protect from corrosion any secondary containment constructed of steel, and shall cathodically protect any portion of the steel secondary containment that is in contact with an electrolyte, including soil or water. Owners and operators shall maintain the exterior of any steel secondary containment 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. The following shall be used to comply with this requirement: Society of Protective Coatings SSPC-PA-1, “Shop, Field, and Maintenance Painting of Steel”.

I. Owners and operators of above ground storage tanks which are either double-walled or which have an interstitial space that is monitored as a method of release detection shall comply with the following applicable requirements:

1. where design and release detection method allow the interstice of a double-walled above ground storage tank to be visually inspected without disturbance of the release detection system, owners and operators shall monthly visually inspect for the presence of water, regulated substances or debris;
2. if testing conducted in accordance with 20.5.109, 20.5.110 or 20.5.111 NMAC indicates that the stored regulated substance is leaking into the interstice of the AST, then owners and operators shall have the
tank repaired in accordance with the tank manufacturer’s instructions or specifications, or with the current edition of an industry standard or code of practice developed by a nationally recognized association or independent testing laboratory. Also, owners and operators shall ensure the repair is conducted in accordance with the requirements in 20.5.110.1010 NMAC;

(3) owners and operators shall monitor all vertical ASTs with an interstitial space between the tank bottom and secondary containment for the presence of water or regulated substances; if gravity drain valves are used for monitoring and removal of water or regulated substances, owners and operators shall keep them closed except during the process of monitoring and draining;

(4) owners and operators shall keep all sumps associated with interstitial monitoring free of water;

(5) owners and operators shall annually inspect and test all sensors used to monitor interstitial spaces, in accordance with manufacturer’s testing protocol, or 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

(6) owners and operators shall remove any liquid found in interstitial spaces, and dispose of it properly.

J. Owners and operators shall operate, maintain, and repair containment sumps on AST systems in order to prevent any leaks or spills in the containment area from entering the environment.

K. Under-dispenser containment must allow for visual inspection and access to the components in the containment system or be periodically monitored for liquid in the sump in accordance with 20.5.110.1008 NMAC.

L. Containment sumps shall be maintained to meet requirements in 20.5.110.1007 NMAC.

[20.5.110.1002 NMAC - N, 07/24/2018]

20.5.110.1003 OPERATION, REPAIR, AND MAINTENANCE OF VAULTS:

A. Owners and operators shall operate, maintain and repair the walls and floor of a vault 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:


(2) American Concrete Institute 224R, “Control of Cracking in Concrete Structures”; or

(3) American Concrete Institute, “Concrete Repair Manual”.

B. Owners and operators shall visually inspect the interior of any vault from the outside monthly, and annually shall enter and inspect the interior of the vault. Owners and operators shall draw off any liquid that has accumulated in a vault within one week of any accumulation of liquid if the liquid is in contact with the tank or piping (but need not draw off liquid only in contact with a tank’s saddles, skid or other support), and shall remove any other debris that has accumulated inside the vault and which is in contact with the tank, piping or saddle, skid or other support. Owners and operators shall properly treat and dispose of any accumulated liquid with a visible sheen and the disposal shall be in accordance with all federal, state, and local statutes, ordinances, and regulations. If a sump is located in the vault, owners and operators shall keep the liquid trap free of water and debris. Owners and operators shall not install any valves in any sump in a vault.

C. Owners and operators shall not store inside a vault any material which is chemically reactive with the regulated substance stored in the AST system, or with the AST itself.

D. Owners and operators shall ensure that a vault is well vented before any fuel transfer begins, and shall keep open all vents during the transfer.

E. For vaults with roofs, owners and operators shall properly maintain and repair the roof of a vault 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.

[20.5.110.1003 NMAC - N, 07/24/2018]

20.5.110.1004 OPERATION, REPAIR, AND MAINTENANCE OF VENTING SYSTEMS: Owners and operators shall operate, maintain and repair venting systems 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. At least monthly, owners and operators shall check emergency vents to ensure they are operational. The following shall be used to comply with this requirement: National Fire Protection
20.5.110.1005 OPERATION AND MAINTENANCE OF SPILL AND OVERFILL PREVENTION:

Owners and operators shall ensure that releases due to spilling or overfilling do not occur.

A. Owners and operators shall ensure that the volume available in a tank is greater than the volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling. Owners and operators shall comply with the transfer procedures described in 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 this requirement:

3. Petroleum Equipment Institute Publication RP600, “Recommended Practices for Overfill Prevention for Shop-Fabricated Above Ground Tanks”; or

B. For additional guidance on Subsection A, see the following:

3. American Petroleum Institute Publication 1621, “Bulk Liquid Stock Control at Retail Outlets”; or

C. Owners and operators of AST systems shall ensure that spill prevention equipment required in 20.5.109.910 NMAC is liquid tight, maintained, and fully operational at all times. In order to ensure the equipment meets these requirements, owners and operators shall no later than three years after the effective date of these regulations meet the following requirements:

1. Spill prevention equipment installed where the outer and inner walls along with bottom of the equipment are clearly visible shall be either monitored monthly or tested every three years. A liquid, pressure, or vacuum test method shall be used in accordance with one of the following:
   a. the equipment manufacturer’s developed and published testing requirements;
   c. the current edition of another industry standard or code of practice developed by a nationally recognized association or independent testing laboratory approved in advance by the department.

2. Spill prevention equipment installed where the outer walls and the bottom are not visible shall be tested by a liquid, pressure, or vacuum test method every three years in accordance with one of the documents in Paragraph (1) of this subsection.

3. Factory installed spill prevention equipment installed as an integral component of a double walled storage tank system shall either be tested every three years in accordance with Paragraph (1) of this subsection or, where a leak in the spill prevention equipment can be detected in the interstice of the tank, owners and operators shall monitor the interstice of the tank every 30 days.

4. Spill prevention equipment that either fails when tested or is found to be damaged during monthly monitoring shall be repaired or replaced in accordance with 20.5.110.1010 NMAC.

5. A report shall be produced which includes the results of any vacuum, pressure, or liquid testing conducted on spill prevention equipment and the report shall be submitted to the department in accordance with the requirements in 20.5.110.1016 NMAC and maintained in accordance with the requirements in 20.5.110.1015 NMAC.

6. Records of the monthly monitoring and testing required in this subsection shall be maintained in accordance with 20.5.110.1015 NMAC.
D. Owners and operators of AST systems shall ensure that overfill prevention equipment required in 20.5.109.910 NMAC is maintained and fully operational at all times. In order to ensure the equipment meets these requirements, owners and operators shall, no later than three years after the effective date of these regulations, and every three years thereafter have the overfill prevention equipment inspected or tested and shall meet the following:

(1) The inspection shall verify the equipment meets the requirements in 20.5.109.910 NMAC, and if the equipment fails to meet these requirements, it shall be repaired, replaced, or re-installed. The repair, replacement, or re-installation shall be in accordance with the manufacturer’s instructions or 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;

(2) Drop tube style overfill prevention equipment shall be removed from the tank for the inspection;

(3) Owners and operators shall ensure the inspections or tests are performed in accordance with the methods and procedures listed in one of the following:

   (a) Petroleum Equipment Institute RP 1200, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection, and Secondary Containment Equipment at UST Facilities”, or
   
   (b) testing requirements developed and published by the overfill prevention equipment manufacturer;

(4) If more than one type of overfill prevention equipment is installed on an AST, owners and operators shall ensure that none of them will interfere with the proper operation of any of the others; and

(5) A report shall be produced which includes the results of any inspections or testing conducted on overfill prevention equipment and the report shall be submitted to the department in accordance with the requirements in 20.5.110.1016 NMAC and maintained in accordance with the requirements in 20.5.110.1015 NMAC.

E. Owners and operators shall report, investigate, and clean up any spills and overfills in accordance with 20.5.118 NMAC.

F. Owners and operators of a storage tank system that meets the requirements for temporary closure and the tank is empty as defined in 20.5.115.1501 NMAC shall not be required to periodically test the spill and overfill prevention equipment.

G. Owners and operators of storage tank systems shall ensure tests of all spill and overfill prevention equipment as required in this section are performed by a qualified tester. The requirements for testers can be found in 20.5.105 NMAC.

20.5.110.1006 OPERATION AND MAINTENANCE OF CORROSION PROTECTION: Owners and operators of metal storage tank systems with any metal tank or piping with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented until the storage tank system is permanently closed or undergoes a change in service pursuant to 20.5.115 NMAC.

A. Owners and operators shall operate and maintain corrosion protection systems to continuously provide corrosion protection to all metal components of the system that routinely contain regulated substances and are in contact with an electrolyte, to include soil or water. Owners and operators shall operate and maintain corrosion protection systems 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) American Petroleum Institute Publication 651, “Cathodic Protection of Aboveground Petroleum Storage Tanks”;
   
   (2) American Petroleum Institute Publication 652, “Linings of Aboveground Petroleum Storage Tank Bottoms”;
   
   
   (4) National Association of Corrosion Engineers Publication RP0193, “External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms”;
   

B. Owners and operators shall ensure that all storage tank systems equipped with cathodic protection...
are inspected for proper operation by a qualified corrosion expert in accordance with the following requirements:

(1) Frequency: owners and operators shall test all cathodic protection systems as follows:
   (a) within six months of installation and at least every three years thereafter;
   (b) within six months of a modification or repair; or
   (c) another reasonable time frame approved in advance in writing by the department;

(2) Inspection criteria: the criteria that are used to determine that cathodic protection is adequate as required by this section must be 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;

(3) Owners and operators of storage tank systems shall provide the department a report on the cathodic protection system test that includes the following:
   (a) name of facility, facility address, and facility ID number issued by the department;
   (b) name of the technician who performed the test;
   (c) certification of the technician in the type of test performed, including certification numbers, national association where the certification was obtained, and expiration date of the certification;
   (d) description of cathodic protection system, for example impressed current, galvanic;
   (e) description of storage tank system including tank ID number, product, capacity, tank type, piping, flex connectors;
   (f) type of test conducted, such as: routine three-year test; test within six months of installation; test within six months after repair or modification;
   (g) whether all flex connectors or metal risers that routinely contain a regulated substance and are in contact with an electrolyte are protected from corrosion. If isolation boots, jackets, or other non-corrodible materials are used to protect this equipment from corrosion, it shall be determined if they are still providing protection from corrosion.
   (h) tester’s pass/fail evaluation and actions to be taken after evaluation;
   (i) facility drawing of the storage tank system and cathodic protection system, indicating location of test points on the storage tank system, cathodic protection test stations, and reference electrode placement; and
   (j) description of cathodic protection system repair or modification.

(4) Owners and operators of storage tank systems shall provide the department a report on impressed current systems that includes all requirements listed in 20.5.110.1016 NMAC; and
   (a) rectifier manufacturer, model, serial number, rated direct current output voltage and amperage;
   (b) rectifier tap settings, direct current output voltage and amperage, and hour meter reading;
   (c) description of structure tested, contact point of test lead, and reference electrode placement;
   (d) structure to soil potential with current applied in millivolts;
   (e) structure to soil potential with current interrupted, instant OFF in millivolts;
   (f) 100 millivolts polarization shift, end voltage and voltage change; and
   (g) test results.

(5) Owners and operators of storage tank systems shall provide the department a report on galvanic systems that includes all requirements listed in 20.5.110.1016 NMAC; and
   (a) description of structure tested, contact point of test lead, and reference electrode placement;
   (b) structure to soil potential measured locally in millivolts;
   (c) structure to soil potential measured remotely in millivolts; and
   (d) test results.

(6) Owners and operators shall use one or more of the following to comply with the requirements of this section:
   (a) National Fire Protection Association Standard 30, “Flammable and Combustible Liquids Code”;
C. Owners and operators shall inspect storage tank systems with impressed current cathodic protection systems every 60 days to ensure the equipment is running properly. Owners and operators shall record the date, time, readings and results of each inspection in a log kept at the facility, and indicate who performed each inspection.

D. Owners and operators shall monthly inspect any equipment or materials used to isolate metal components of AST systems and shall repair or replace equipment and materials used to meet corrosion protection requirements in this section.

E. For storage tank systems using cathodic protection, owners and operators shall maintain records of the operation of the cathodic protection in accordance with 20.5.110.1015 NMAC to demonstrate compliance with the performance standards in this section. These records shall provide the following:

   (1) the results of the last three inspections required in Subsection C of this section; and
   (2) the results of testing from the last two inspections required in Subsection B of this section.

[20.5.110.1006 NMAC - N, 07/24/2018]

[The department provides an optional form that may be used for the cathodic protection system test report required in Subsection B. The form is available on the petroleum storage tank bureau’s pages on the department 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.]

20.5.110.1007 OPERATION AND MAINTENANCE OF CONTAINMENT SUMPS FOR AST SYSTEMS:

A. Owners and operators shall maintain all containment sumps (including but not limited to dispenser sumps and transition sumps) and draw off liquid that has accumulated in the containment sumps within one week of the accumulation, and shall remove any other debris that has accumulated inside the containment sumps. Owners and operators shall properly treat and dispose of any accumulated liquid with a visible sheen, and the disposal shall be in accordance with all federal, state, and local statutes, ordinances, and regulations. If gravity drain valves are used to remove accumulated liquid from the containment sumps, owners and operators shall keep all valves closed except during the process of draining the accumulated liquid.

B. In order to maintain the highest level of secondary containment in case of a discharge from, or an overfill of, an AST system, owners and operators shall keep the containment sumps and basin sumps free of water, regulated substances, and debris.

C. Owners and operators shall maintain all containment sumps associated with interstitial monitoring of underground piping; the sumps shall be liquid tight and kept free of water.

D. Owners and operators of AST systems with single walled containment sumps associated with interstitial monitoring shall have the integrity of the sumps tested no later than three years after the effective date of these regulations, and every three years thereafter, in accordance with the following:

   (1) Hydrostatic or other test methods shall be conducted to ensure the containment sumps are liquid tight including at all penetrations in accordance with one of the following:
       (a) the equipment manufacturer’s developed and published testing requirements;
       (b) Petroleum Equipment Institute RP 1200, “Recommended Practices for the
Testing and Verification of Spill, Overfill, Leak Detection, and Secondary Containment Equipment at UST Facilities”; or

(c) 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;

(2) Hydrostatic test methods using a test apparatus developed specifically for testing containment sumps shall ensure the containment sumps are liquid tight including at all penetrations and comply with one of the following:

(a) protocols developed by the manufacturer of the test apparatus and the certification as listed on the web site of the national work group on leak detection evaluation;

(b) protocols developed and published by the manufacturer of the containment sump;

(c) Petroleum Equipment Institute RP 1200, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection, and Secondary Containment Equipment at UST Facilities”; or

(d) an alternate test method approved by the department in writing in advance in accordance with the requirements for Alternate Methods Requests in 20.5.110.1014 NMAC.

(3) A low liquid level hydrostatic test method may be conducted if all of the following conditions are met:

(a) test method used shall be in accordance with the following:

(i) the liquid level meets the third-party certification for the sensor installed in the sump;

(ii) the duration of the test shall be a minimum of one hour unless a different test period is specified by the containment sump manufacturer or in (iii) below;

(iii) 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) either a hydrostatic test shall be conducted every 12 years in accordance with Paragraph (1) and (2) of Subsection D or a site check shall be conducted every 12 years in accordance with in Subsection B of 20.5.118.1801 NMAC.

(c) a sump sensor that automatically shuts off equipment associated with the sump and meets the requirements for placement and testing of sensors used for interstitial monitoring in Subparagraph (b) of Paragraph (3) of Subsection A of 20.5.111.1106 NMAC;

(4) A low liquid level test per Paragraph (3) of this subsection shall not be conducted if the following conditions exist:

(a) a liquid is discovered in the sump or evidence is found that a liquid has been at a level equal to or higher than the lowest penetration in the sump; then testing has to be conducted in accordance with Paragraph (1) of this subsection;

(b) sensors in containment sumps are discovered to be located higher than the lowest part of the sump; then a test shall be conducted in accordance with Paragraph (1) of this subsection and owners and operators shall report and investigate a suspected release in accordance with the requirements in 20.5.118 NMAC; or

(c) a site check conducted in accordance with Paragraph (3) of this subsection indicates there has been a release from the containment sump.

E. Owners and operators of AST systems with double-walled containment sumps associated with interstitial monitoring shall have the integrity of the sumps tested no later than three years from the effective date of these regulations, and every three years thereafter, in accordance with one of the following:

(1) interstices under vacuum, pressure, or brine filled, are continuously monitored by use of interstitial sensors or visually inspected every 30 days, and the monitoring records are maintained in accordance with 20.5.110.1015 NMAC. Owners and operators shall ensure that annual functionality testing or annual inspections of the monitoring equipment are conducted in accordance with 20.5.111.1104 NMAC. Owners and operators who cannot demonstrate that the interstices of the containment sumps are continuously monitored or inspected every 30 days shall have the sumps tested in accordance with Subsection D above; or

(2) containment sumps with dry interstices that are not continuously monitored are integrity tested in accordance with Subsection D of 20.5.110.1007 NMAC.

F. All sensors and equipment used to monitor containment sumps and their interstices shall be functionality tested annually in accordance with 20.5.111.1104 NMAC.

G. A report shall be produced which includes the results of the testing, and the report shall be submitted in accordance with 20.5.110.1016 NMAC and maintained in accordance with the requirements in 20.5.110.1015 NMAC.
H. Owners and operators of storage tank systems shall ensure that tests of containment sumps as required in this section are performed by qualified testers. The requirements for testers can be found in 20.5.105 NMAC.

I. Owners and operators of storage tank systems shall dispose of water or other test media used in testing of components of petroleum storage tank systems, or any accumulated liquid with a visible sheen, and the disposal shall be in accordance with all federal, state, and local statutes, ordinances, and regulations. Owners and operators who temporarily store the test media or water on-site shall do so in accordance with all federal, state, and local statutes, ordinances, and regulations.

[20.5.110.1007 NMAC - N, 07/24/2018]

20.5.110.1008 PERIODIC OPERATION AND MAINTENANCE WALK-THROUGH INSPECTIONS:

A. Owners and operators shall conduct walk-through inspections that, at a minimum, check equipment as specified below:

   (1) For spill and overfill prevention equipment, every 30 days (exception: spill prevention equipment at AST systems receiving deliveries at intervals greater than every 30 days may be checked prior to each delivery):
      (a) visually check all spill and overfill prevention equipment for damage;
      (b) remove liquid or debris;
      (c) check for and remove obstructions in the fill pipe;
      (d) check the fill cap to make sure it is securely on the fill pipe; and
      (e) for double walled spill prevention equipment with interstitial monitoring, check for liquid or a leak in the interstitial area; and
      (f) check overfill prevention equipment for proper operation and determine whether maintenance is required.

   (2) For release detection equipment, every 30 days:
      (a) check to make sure the release detection equipment is operating with no alarms or other unusual operating conditions present; and
      (b) ensure records of release detection testing are reviewed and current.

   (3) For containment sumps, every 30 days:
      (a) visually check the containment sump for damage, liquid in the containment area, and releases to the environment;
      (b) remove liquid and debris in containment sumps; and
      (c) for double walled sumps with interstitial monitoring, check for liquid or a leak in the interstitial area.

   (4) Annually: check hand held release detection equipment, such as, but not limited to, tank gauge sticks for operability and serviceability;

B. Owners and operators shall conduct these walk-through inspections in accordance with one of the following:

   (1) the current edition of a national code of practice or standard developed by a nationally recognized association or independent testing laboratory that checks equipment included in Subsection A of 20.5.110.1008 NMAC; or

   (2) a checklist developed by the department.

C. If monthly visual checks of containment sumps are not being conducted or records of the checks cannot be produced, a test in accordance with Subsection D of 20.5.10.1007 NMAC shall be conducted within 30 days of failing to meet the requirement for monthly monitoring of the equipment.

D. Owners and operators must maintain records of operation and maintenance walkthrough inspections in accordance with 20.5.110.1015 NMAC. Records must include a list of each area checked, whether each area checked was acceptable or needed action taken, a description of actions taken to correct an issue, and delivery records if spill prevention equipment is checked less frequently than every 30 days due to infrequent deliveries.

[20.5.110.1008 NMAC - N, 07/24/2018]

20.5.110.1009 COMPATIBILITY: Owners and operators shall use a storage tank system made of or lined with materials that are compatible with the substance stored in the storage tank system.

A. Owners and operators must notify the department at least 30 days prior to changing the substance in any of their tanks to a regulated substance containing greater than ten percent ethanol, greater than twenty percent
biodiesel, or any other regulated substance identified by the department.

B. In addition, owners and operators with storage tank systems storing these regulated substances must meet one of the following:

1. Demonstrate compatibility of the storage tank system (including the tank, piping, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill equipment). Owners and operators may demonstrate compatibility of the storage tank system by using one of the following options:
   
   a. Certification or listing of storage tank system equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or
   
   b. Equipment or component manufacturer approval. The manufacturer’s approval must be in writing, include an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer.

2. For storage tank systems or system components that contain, but are not compatible with, one of the regulated substances listed in Subsection A of 20.5.110.1009 NMAC, or for those storage tank systems where compatibility cannot be determined, remove all regulated substances from the tank system by the effective date of these regulations, and comply with one of the following:
   
   a. Replace the storage tank system or system components in accordance with the requirements for a new storage tank system in 20.5.109 NMAC;
   
   b. Prior to putting the tank back in service, modify the storage tank system in accordance with 20.5.110.1010 NMAC and one of the following:
      
      i. Install an internal lining in the tank, in accordance with the lining manufacturer’s installation instructions, to address compatibility issues; or
      
      ii. Comply with tank or equipment manufacturer’s instructions;

   c. Change the regulated substance stored to one that is compatible with the storage tank system; or

   d. Permanently close the storage tank system within 12 months of the effective date of these regulations in accordance with the permanent closure requirements in 20.5.115.1502 NMAC; or

3. Use another option determined by the department to be no less protective of human health and the environment than the options listed in this section.

C. Owners and operators must maintain records documenting compliance with this section for as long as the storage tank system is used to store the regulated substance.

D. Owners and operators shall use 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 to comply with the compatibility requirements of this section. American Petroleum Institute Recommended Practice RP 1626, “Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Filling Stations” shall be used to comply with the requirements of this section as they pertain to storage of ethanol blends.

[20.5.110.1009 NMAC - N, 07/24/2018]

20.5.110.1010 REPAIRS, REPLACEMENTS AND MODIFICATIONS: Owners and operators of a storage tank system shall ensure that repairs, replacements, and modifications will prevent releases due to structural failure or corrosion as long as the storage tank system is used to store regulated substances. Owners and operators shall remove all regulated substances from a storage tank system when a release has been confirmed until it is repaired or replaced in accordance with the requirements of this section.

A. Determining whether repair, replacement or modification is necessary. Owners and operators shall determine whether a repair, replacement or modification to a storage tank system is necessary in consultation with a department inspector, after providing notice required by this part.

1. If owners and operators are repairing, replacing or modifying piping of any kind that is connected to a storage tank, the determination shall be made during an on-site inspection that provides the inspector the opportunity to view the piping while it is exposed.

2. If, during an on-site inspection, the inspector determines that:
   
   a. Any steel piping connected to a tank indicates corrosion; or
   
   b. Any non-corrodible piping connected to a tank shows signs of deterioration or failure,

   Then the owner and operator shall replace all piping connected to that tank, and shall inspect all other piping at the same facility that is made of the same material to determine its condition prior to
B. Owners and operators shall properly conduct repairs, replacements and modifications to storage tank systems 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 in accordance with the manufacturer’s instructions and recommended practices. Owners and operators shall use one or more of the following to comply with the requirements of this section:

6. American Petroleum Institute 570, “Piping Inspection Code: Inspection, Repair, Alteration and Rerating of In-Service Piping Systems”;

C. Owners and operators shall not internally line ASTs as a means of repair.

D. Owners and operators shall tightness test a storage tank system that has been replaced, modified or repaired, prior to returning the system to service, in accordance with 20.5.111.1101 NMAC and Subparagraph (a) of Paragraph (3) of Subsection A of 20.5.111.1105 NMAC except as provided below:

1. the repaired or modified tank is internally inspected in accordance with the current edition of an industry standard or code of practice approved in advance by the department; or
2. owners and operators shall use an equivalent test method, which complies 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 in writing by the department.

E. Upon completion of a modification or repair of any cathodically protected storage tank system, owners and operators shall test the cathodic protection system in accordance with 20.5.110.1006 NMAC to ensure that it is operating properly.

F. Owners and operators of a storage tank system shall maintain records of each repair, replacement and modification until the storage tank system is permanently closed pursuant to 20.5.115 NMAC.

G. Owners and operators shall repair an above ground storage tank if an internal inspection determines that a release is occurring or that the tank bottom or shell thickness is below minimum thickness requirements. Owners and operators shall keep the records of internal inspections for the life of the tank. Minimum thickness requirements shall be determined by one of the following:

1. manufacturer’s specifications;
2. 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; or
(3) minimum thickness for the tank bottom shall never be less than one half of the original bottom plate thickness and minimum thickness for the tank shall never be less than one-tenth inch.

H. Owners and operators shall meet all applicable installation requirements of 20.5.109 NMAC, including testing requirements, when repairing, replacing or modifying a storage tank system involves installing new components. If any tank or piping of a tank system is replaced, owners and operators shall follow all requirements for properly assessing the site for contamination in compliance with 20.5.115 NMAC prior to installing the new components.

I. Repairs to secondary containment of tanks, piping and containment sumps must be tested for tightness according to the manufacturer’s instructions, a code of practice developed by a nationally recognized association or independent testing laboratory, or according to requirements established by the implementing agency within 30 days following the date of completion of the repair.

J. Within 30 days following any repair to spill or overfill prevention equipment, the repaired spill or overfill prevention equipment must be tested or inspected, as appropriate, in accordance with 20.5.110.1005 NMAC to ensure it is operating properly.

[20.5.110.1010 NMAC - N, 07/24/2018]

20.5.110.1011 INSPECTIONS, MONITORING AND TESTING:

A. For the purpose of enforcing the provisions of these regulations, all owners and operators of storage tanks shall, upon the request of the secretary or authorized department representatives, furnish information relating to such tanks, including tank equipment and contents, conduct monitoring or testing, and permit any department representative at all reasonable times to have access to, and to copy all records relating to such tanks. Owners and operators shall comply with all applicable and appropriate Occupational Health and Safety Act requirements, Sections 50-9-1 through 50-9-25 NMSA 1978, so that storage tanks may be safely inspected. For the purpose of enforcing these regulations, department officers, employees, or representatives are authorized to:

(1) enter at reasonable times any establishment or place where a storage tank is located;
(2) inspect the storage tank system and obtain samples of its contents;
(3) conduct monitoring or testing of the tanks, associated equipment, contents, or surrounding soils, air, surface water, or groundwater; and
(4) retrieve all data from any electronic release detection equipment or device.

B. The department shall commence and complete each inspection with reasonable promptness. If the secretary or department representative obtains any samples, prior to leaving the premises he shall give to the owner, operator or agent in charge a receipt describing the sample obtained and, if requested, a portion of each sample equal in volume or weight to the portion retained. If any analysis is made of the samples, a copy of the results of the analysis shall be furnished promptly to the owner, operator or agent in charge.

C. Owners and operators shall permit the department or authorized department representative to be present at and inspect all storage tank system installations, replacements, repairs, substantial modifications, installations of leak detection systems and storage tank system closures.

D. Owners and operators shall not intentionally delete any history from any electronic release detection equipment or device.

[20.5.110.1011 NMAC - N, 07/24/2018]

20.5.110.1012 REQUIRED NOTIFICATION PRIOR TO REPLACEMENT, REPAIR AND MODIFICATION: 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 replacement, repair, and modification of the storage tank system are to take place. Notice need not be provided for normal maintenance. The inspector may require that critical junctures be performed from Monday through Friday during regular business hours.

A. For replacements, modifications (including internal lining or changes to cathodic protection systems), and repairs, the term “critical junctures” means:

(1) completion of pouring a concrete pad or footings;
(2) completion of the excavation of existing piping;
(3) actual performance of the repair, lining, or modification;
(4) any time during the project in which components of piping are connected;
(5) any time during the project in which a tank, its associated piping, spill prevention equipment, or secondary containment sumps are tested; and
(6) any time during the project when overfill prevention equipment is inspected to ensure it
meets the requirements in 20.5.110.1005 NMAC.

B. Owners, operators and certified tank installers shall give at least 30 days written notice before the replacement, modification or repair of a storage tank system. Owners and operators shall also give at least 30 days written notice before the application of a secondary containment coating. It may not be feasible for owners, operators, and certified tank installers to provide advance notice of emergency repairs; however, owners, operators, and certified tank installers shall provide notice of emergency repairs as soon as possible after completing emergency repairs. At a minimum, the notice for replacements, modifications, and repairs 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. description of type of replacement, modification or repair to be performed (such as spill containment, overfill prevention, release detection, piping or other);
6. expected date on which replacement, modification or repair will be performed;
7. whether any part of the system is within 1,000 feet of a community water system or a potable drinking water well; and
8. signature of owner, operator or an authorized representative.

C. In addition to the written notices 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.

D. 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. [20.5.110.1012 NMAC - N, 07/24/2018]

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

20.5.110.1013 DEPARTMENT REVIEW AND APPROVAL OF PLANS, INSTALLATION, OPERATION, AND MAINTENANCE: Owners and operators shall view any inspection, review or approval by the department as permission to proceed in accordance with all applicable rules, codes and standards. Review and approval by the department shall not relieve any owner, operator, or certified tank installer of his responsibility for compliance. If the department overlooks any deficiencies or violations in the course of plan review or inspection provided in 20.5 NMAC, the department may later require correction and compliance. [20.5.110.1013 NMAC - N, 07/24/2018]

20.5.110.1014 ALTERNATE METHODS:
A. If owners and operators want to operate, maintain, replace, repair or modify any part of a storage tank system 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 to operate, maintain, replace, repair or modify the system, 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.
The bureau 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 website or by contacting the Petroleum Storage Tank Bureau at 505-476-4397 or 2905 Rodeo Park Drive East, Building 1, Santa Fe, NM 87505.

20.5.110.1015 RECORD KEEPING:

A. Owners and operators shall maintain the following information for the life of the storage tank system:

1. documentation of operation of corrosion protection equipment that demonstrates compliance with 20.5.110.1006 NMAC;
2. documentation of storage tank system repairs, replacements and modifications that demonstrate compliance with 20.5 NMAC;
3. documentation of compliance with release detection requirements in accordance with 20.5.11 NMAC;
4. inspection logs required by 20.5.110 NMAC and 20.5.111 NMAC;
5. tank tightness, internal inspection and integrity test documents required by 20.5 NMAC;
6. any document approving any alternate method;
7. spill and overfill prevention equipment testing/inspection records;
8. containment sump testing records;
9. documentation of compatibility for AST systems;
10. documentation of compliance for spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping;
11. documentation of periodic walkthroughs;
12. documentation of operator training in accordance with 20.5.104 NMAC;
13. the operation and maintenance plan and related documentation as required by 20.5.10.1001 NMAC; and
14. any other record or written approval required in 20.5 NMAC.

B. Availability and maintenance of records. Owners and operators shall keep the required records for the operational life of a tank, piping and tank system either:

1. at the storage tank site and immediately available for inspection by the department; or
2. at a readily available alternative site and the records shall be provided for inspection to the department upon request; if records are not available at a site during inspection, owners and operators shall send to the inspector within 10 working days all records requested by the inspector.

C. Owners and operators shall maintain permanent closure records required under 20.5.115 NMAC. Owners and operators are also provided with the additional alternative of mailing closure records to the department if they cannot be kept at the site or an alternative site as indicated above.

D. If the owner and operator of a storage tank are separate persons, only one person is required to comply with the requirements of this section; however, both parties are liable in the event of noncompliance.

20.5.110.1016 REPORTING:

Owners and operators of a storage tank system shall cooperate fully with inspections, monitoring and testing conducted by the department, as well as requests for document submission, testing, and monitoring by the owner or operator.

A. Owners and operators shall provide the following information to the department:

1. registration for all storage tank systems in accordance with 20.5.102 NMAC, which includes certification of installation for new AST systems in accordance with Subsection C of 20.5.109.919 NMAC;
2. reports of all releases in accordance with 20.5.102 NMAC and the requirements in 20.5.18 NMAC for reporting suspected releases, spills and overfills and confirmed releases;
3. corrective actions planned or taken as required by 20.5.119 NMAC and 20.5.200 NMAC;
4. notification before storage tank system installation, replacement, repair or modification in accordance with 20.5.109 NMAC and 20.5.110 NMAC; notification when any person assumes ownership of a storage tank system in accordance with 20.5.102 NMAC and notification before permanent closure or change in service in accordance with 20.5.115 NMAC; it may not be feasible for owners and operators to provide advance notice of emergency repairs; however, owners and operators shall provide notice of emergency repairs as soon as possible after completing emergency repairs;
5. notification prior to storage tank systems changing to certain regulated substances in
accordance with Subsection A of 20.5.110.1009 NMAC; and

(6) updated project drawings for any addition, replacement or modification of a storage tank system.

B. Owners and operators shall provide to the department all reports as required in 20.5.110 NMAC within 60 days of completion of the tests.

C. Owners and operators shall report any failed tests or inspections to the department within 24 hours of completion of the test or inspection in accordance with 20.5.118.1801 NMAC.

D. Owners and operators shall ensure all reports required in 20.5.110 NMAC contain, at a minimum, the following:

1. facility name and address;
2. facility ID number;
3. owner and operator name and address;
4. owner ID number;
5. date report was completed;
6. date of the test;
7. duration of the test;
8. brand name and model number of equipment being tested or sufficient description to allow identification of the equipment;
9. type of equipment being tested;
10. type of test, including test procedures and methods;
11. results of the test;
12. name of the person who performed the inspection or test, and their qualifications as specified in 20.5.105 NMAC;
13. name of the regulated substance stored in the tank associated with the equipment being tested; and
14. for the inspections and testing of spill prevention equipment, overfill prevention equipment, and containment sumps, include the information from the following forms, as applicable, from the Petroleum Equipment Institute Publication RP 1200, “Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities”:
   a. “Spill Bucket Integrity Testing, Hydrostatic Test Method, Single and Double-Walled Vacuum Method”;
   b. “Containment Sump Integrity Testing, Hydrostatic Testing Method”;
   c. “UST Overfill Equipment Inspection, Automatic Shutoff Device and Ball Float Valve”;
   or
   d. “Automatic Tank Gauge Operation Inspection”.

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

HISTORY OF 20.5.110 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-5, Underground Storage Tank Regulations-Part V-General Operating Requirements, filed 9/12/88.
EIB/USTR-5, Underground Storage Tank Regulations-Part V-General Operating Requirements, filed 2/14/89.
EIB/USTR-5, Underground Storage Tank Regulations-Part V-General Operating Requirements, filed 8/4/89.
EIB/USTR-5, Underground Storage Tank Regulations-Part V-General Operating Requirements, filed 6/12/90.

History of Repealed Material: 20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements (filed 2/27/97), repealed 8/15/03.
20.5.5 NMAC, Petroleum Storage Tanks, General Operating Requirements (filed 7/16/03) repealed 4/4/08.
20.5.5 NMAC, Petroleum Storage Tanks, General Operating Requirements (filed 4/4/08) repealed 7/24/18.

Other History:
EIB/USTR-5, Underground Storage Tank Regulations - Part V - General Operating Requirements, filed 6/12/90, renumbered, reformatted and replaced by 20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements, effective 11/5/95;
20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements filed 10/6/95 replaced by 20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements, effective 4/1/97;
20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements, filed 2/27/97 was renumbered, reformatted and replaced by 20.5.5 NMAC, Petroleum Storage Tanks, General Operating Requirements, effective 8/15/03.
20.5.5 NMAC, Petroleum Storage Tanks, General Operating Requirements (filed 7/16/03) replaced by 20.5.5 NMAC, Petroleum Storage Tanks, General Operating Requirements, effective 4/4/08.
20.5.5 NMAC, Petroleum Storage Tanks, General Operating Requirements (filed 4/4/08) was renumbered, reformatted, and replaced by 20.5.110 NMAC, Petroleum Storage Tanks, General Operating Requirements for Above Ground Storage Tanks, effective 7/24/18.