

1 **TITLE 20 ENVIRONMENTAL PROTECTION**
2 **CHAPTER 5 PETROLEUM STORAGE TANKS**
3 **PART 5 GENERAL OPERATING REQUIREMENTS**

[JJP 8 22 07]

4
5 20.5.5.1 ISSUING AGENCY: New Mexico Environmental Improvement Board.
6 [20.5.5.1 NMAC - Rp, 20.5.5.1 NMAC, xx/xx/200x]

7
8 20.5.5.2 SCOPE: This part applies to owners and operators of storage tanks as provided in
9 20.5.1 NMAC. If the owner and operator of a storage tank are separate persons, only one person
10 is required to comply with the requirements of this part, including any notice and reporting
11 requirements; however, both parties are liable in the event of noncompliance.
12 [20.5.5.2 NMAC - Rp, 20.5.5.2 NMAC, xx/xx/200x]

13
14 20.5.5.3 STATUTORY AUTHORITY: This part is promulgated pursuant to the
15 provisions of the Hazardous Waste Act, NMSA 1978, sections 74-4-1 through 74-4-14, and the
16 general provisions of the Environmental Improvement Act, NMSA 1978, sections 74-1-1
17 through 74-1-156.
18 [20.5.5.3 NMAC - Rp, 20.5.5.3 NMAC, xx/xx/200x]

19
20 20.5.5.4 DURATION: Permanent.
21 [20.5.5.4 NMAC - Rp, 20.5.5.4 NMAC, xx/xx/200x]

22
23 20.5.5.5 EFFECTIVE DATE: ~~August 15, 2003~~ _____, 200_, unless a later date is
24 indicated in the bracketed history note at the end of a section.
25 [20.5.5.5 NMAC - Rp, 20.5.5.5 NMAC, xx/xx/200x]

26
27 20.5.5.6 OBJECTIVE: The purpose of 20.5.5 NMAC is to ensure that the operation and
28 maintenance of storage tanks will prevent releases and to protect the public health, safety and
29 welfare and the environment of the state.
30 [20.5.5.6 NMAC - Rp, 20.5.5.6 NMAC, xx/xx/200x]

31
32 20.5.5.7 DEFINITIONS: The definitions in 20.5.1 NMAC apply to this part.
33 [20.5.5.7 NMAC - Rp, 20.5.5.7 NMAC, xx/xx/200x]

34
35 ~~20.5.5.8 20.5.5.399 [RESERVED]~~

36
37 ~~20.5.5.4008~~ OPERATION AND MAINTENANCE OF STORAGE TANK SYSTEMS:
38 Owners and operators shall properly maintain all tanks, piping, secondary containment and other
39 associated equipment for all storage tank systems required in ~~20.5.4.400, 401, 402, and 404 (if~~
40 ~~applicable)~~ 20.5.4 NMAC, and shall ensure that all tanks, piping, secondary containment and
41 other associated equipment for all storage tank systems are fully operational at all times.

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

44 B. Owners and operators shall maintain the exterior coating of an AST and ancillary
45 equipment not in contact with soil in accordance with the current edition of an industry standard
46 or code of practice developed by a nationally recognized association or independent testing

laboratory approved in advance ~~in writing~~ by the department. The following may be used to comply with this requirement: ~~Society of Protective Coating SSPC PA 1, "Shop, Field, and Maintenance Painting of Steel."~~

(1) Society of Protective Coatings SSPC-PA 1, "Shop, Field, and Maintenance Painting of Steel;"

(2) Society of Protective Coatings, "The Inspection of Coatings and Linings: A Handbook of Basic Practice for Inspectors, Owners and Specifiers;"

(3) Society of Protective Coatings SSPC-PA Guide 4, "Guide to Maintenance Repainting with Oil Base or Alkyd Painting Systems;" or

(4) Society of Protective Coatings SSPC-PA Guide 5, "Guide to Maintenance Coating of Steel Structures in Atmospheric Service."

C. Owners and operators shall mark fill port lids of ASTs and ~~underground storage tanks (USTs)~~ 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 ~~in writing~~ by the department. The following may be used to comply with this requirement: American Petroleum Institute RP1637, "Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Service Stations and Distribution Terminals." Owners and operators shall clearly label the contents of all storage tanks.

D. If any steel piping installed in a trench is used in an AST or UST system, owners and operators shall visually inspect the trench monthly. Owners and operators shall draw off any water that has accumulated in the trench within one week of a rainfall event, and shall remove any other debris that has accumulated inside the trench. Owners and operators shall properly treat and dispose of any accumulated water with a visible sheen. If a basin sump is located in the trench, owners and operators shall keep the basin sump free of water and debris. Owners and operators shall not install any valves in any basin sump in a piping trench.

E. Owners and operators shall maintain ~~containment~~ all sumps ~~under dispensers required by Subsection G of 20.5.4.401 NMAC (including, but not limited to: turbine sumps, STP and submersible pumps)~~, and draw off water that has accumulated in the sumps within one week of a rainfall event, and shall remove any other debris that has accumulated inside the ~~basin containment~~ sumps. Owners and operators shall properly treat and dispose of any accumulated water with a visible sheen. If gravity drain valves are used to remove water from the containment sumps, owners and operators shall keep all valves closed except during the process of draining water.

~~F. Owners and operators of AST systems shall adopt an operations and maintenance plan, which shall be kept and followed for the life of the system. If all exterior surfaces of the AST system are completely visible, readily accessible, and not in contact with the ground or soil, then those owners and operators are not required to perform internal inspections and tightness testing as part of their operations and maintenance plan, but shall comply with the requirements for inspections and testing required for installations, modification and repairs by 20.5.4, 20.5.5 and 20.5.6 NMAC. The operations and maintenance plan shall 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. The following may be used to comply with this requirement:~~

~~(1) American Petroleum Institute 570, "Pipe Inspection Code: Inspection Repair, Alteration, and Rerating of In-Service Piping Systems;"~~

~~(2) American Petroleum Institute Standard 653, "Tank Inspection, Repair,~~

1 Alteration, and Reconstruction;” or

2 ~~_____ (3) Steel Tank Institute Standard SP001, “Standard for Inspection of In-Service~~
3 ~~Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids.”~~

4 GF. Owners and operators shall check ASTs monthly for the presence of water at the
5 lowest possible point(s) inside the tank, and remove any water found to the extent technically
6 possible. Owners and operators shall properly dispose of any and all water removed from an
7 AST.

8 [20.5.5.8 NMAC - Rp, 20.5.5.400 NMAC, xx/xx/200x]

9
10 20.5.5.9 OPERATIONS AND MAINTENANCE PLAN: Owners and operators of all
11 storage tank systems shall adopt and implement a written operations and maintenance plan,
12 which they shall keep at the facility for the life of the storage tank system. The operations and
13 maintenance plan shall be as specific as possible for each facility and shall include the piping
14 and ancillary equipment that routinely contains regulated substances, or controls the flow of
15 regulated substances. Owners and operators may use, by reference, operational and maintenance
16 guidance from the current edition of an industry standard or code of practice developed by a
17 nationally recognized association or independent testing laboratory. Owners and operators who
18 reference a current edition of an industry standard or code of practice shall maintain a copy of
19 the code or standard they reference. Owners and operators shall not implement the plan until it
20 has been approved by the department.

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

22 (1) a detailed plan showing what inspections, operations, testing and maintenance
23 shall be done on a daily, monthly, quarterly and annual basis in accordance with the current
24 edition of an industry standard or code of practice developed by a nationally recognized
25 association or independent testing laboratory approved in advance by the department. The plan
26 shall include a description of how owners and operators properly dispose of regulated substances
27 spilled at the facility, and any water or soil removed from any part of the storage tank system
28 where there is any indication it might be or have been contaminated with a regulated substance;
29 and

30 (2) responses to emergency situations. This information shall be readily
31 accessible at the facility. Responses to emergency situations shall include the following:

32 (a) the location of equipment to be shut down during an emergency and
33 how to safely perform these tasks;

34 (b) actions to be taken in the event of a fire, flooding, a spill, or a release of
35 regulated substances;

36 (c) a site diagram; and

37 (d) a list of whom to notify or call during or after an emergency situation.

38 B. The following may be used to comply with the requirements of this section:

39 (1) American Petroleum Institute 570, “Pipe Inspection Code: Inspection Repair,
40 Alteration, and Rerating of In-Service Piping Systems;”

41 (2) American Petroleum Institute Standard 653, “Tank Inspection, Repair,
42 Alteration, and Reconstruction;” or

43 (3) Steel Tank Institute Standard SP001, “Standard for Inspection of In-Service
44 Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids.”

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

1 [20.5.5.9 NMAC - Rp, 20.5.5.400 NMAC, xx/xx/200x]

2 *[Note: language about tanks not in contact with soil was deleted because the latest editions of*
3 *industry codes and standards address this issue, and because the language conflicted with*
4 *requirements in Part 6.]*

5
6 20.5.5.4010 OPERATION, AND MAINTENANCE, REPAIR AND REPLACEMENT OF
7 SECONDARY CONTAINMENT FOR ASTS:

8 A. Owners and operators shall operate, maintain and repair secondary containment in
9 accordance with the current edition of an industry standard or code of practice developed by a
10 nationally recognized association or independent testing laboratory approved in advance ~~in~~
11 ~~writing~~ by the department.

12 B. Owners and operators shall not store inside the secondary containment any
13 material which is chemically reactive with the regulated substance stored in the AST system, or
14 with the AST itself. Owners and operators shall not store any material in the secondary
15 containment that reduces the capacity~~volume~~ of the secondary containment below the
16 requirement in ~~Subsection C of~~ 20.5.4.40129 NMAC.

17 C. Owners and operators shall draw off water that has accumulated in the secondary
18 containment, including all sumps, within one week of a rainfall event, and shall remove any
19 other debris that has accumulated inside the secondary containment. Owners and operators shall
20 properly treat and dispose of any accumulated water with a visible sheen. If gravity drain valves
21 are used to remove water from the secondary containment, owners and operators shall keep all
22 valves will be kept closed except during the process of draining water.

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

27 E. Owners and operators shall maintain, repair and replace any concrete secondary
28 containment systems in accordance with the current edition of an industry standard or code of
29 practice developed by a nationally recognized association or independent testing laboratory
30 approved in advance ~~in writing~~ by the department. The following may be used to comply with
31 this requirement:

32 (1) Society of Protective Coating and National Association of Corrosion Experts
33 SSPC-TU2/NACE 6G197, "Design, Installation and Maintenance of Coating Systems for
34 Concrete used in Secondary Containment;"

35 (2) American Concrete Institute 224R, "Control of Cracking in Concrete
36 Structures;" or

37 (3) American Concrete Institute "Concrete Repair Manual."

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

41 G. Owners and operators shall protect from corrosion any secondary containment
42 constructed of steel, and shall cathodically protect any portion of the steel secondary
43 containment that is in contact with soil or water. Owners and operators shall maintain the
44 exterior of any steel secondary containment in accordance with the current edition of an industry
45 standard or code of practice developed by a nationally recognized association or independent
46 testing laboratory approved in advance ~~in writing~~ by the department. The following may be used

1 to comply with this requirement: Society of Protective Coatings SSPC-PA-1, "Shop, Field, and
2 Maintenance Painting of Steel."

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

6 (1) Where design and release detection method allow the interstice of a double-
7 walled above ground storage tank to be visually inspected without disturbance of the release
8 detection system, owners and operators shall ~~annually~~ monthly visually inspect for the presence
9 of water, regulated substances or debris.

10 (2) Owners and operators shall notify the department in accordance with 20.5.7
11 NMAC if a visual inspection, other inspection or testing conducted in accordance with 20.5.5 or
12 20.5.6 NMAC indicate that a release may have occurred.

13 (3) If testing conducted in accordance with 20.5.4, 20.5.5 or 20.5.6 NMAC
14 indicates that the stored regulated substance is leaking into the interstice of the AST, then
15 owners and operators shall have the tank repaired in accordance with the tank manufacturer's
16 instructions or specifications, or with the current edition of an industry standard or code of
17 practice developed by a nationally recognized association or independent testing laboratory.

18 (4) Owners and operators shall monitor all vertical ASTs with an interstitial space
19 between the tank bottom and secondary containment for the presence of water or regulated
20 substances. If gravity drain valves are used for monitoring and removal of water or regulated
21 substances, owners and operators shall keep them closed except during the process of monitoring
22 and draining.

23 (5) Owners and operators shall keep all sumps associated with interstitial
24 monitoring free of water.

25 (6) Owners and operators shall inspect all sensors used to monitor interstitial
26 spaces annually in accordance with manufacturer's recommendations, or in accordance with the
27 current edition of an industry standard or code of practice developed by a nationally recognized
28 association or independent testing laboratory approved in advance by the department.

29 (7) Owners and operators shall remove all liquid found in interstitial spaces, and
30 dispose of it properly.

31 [20.5.5.10 NMAC - Rp, 20.5.5.401 NMAC, xx/xx/200x]

32
33 20.5.5.401-11 OPERATION, REPAIR AND MAINTENANCE OF SECONDARY
34 CONTAINMENT FOR USTS:

35 A. Owners and operators of underground storage tank systems shall operate,
36 maintain and repair secondary containment in accordance with the manufacturer's instructions or
37 specifications, or with the current edition of an industry standard or code of practice developed
38 by a nationally recognized association or independent testing laboratory approved in advance by
39 the department. The following may be used to comply with this requirement:

40 (1) U.S. Environmental Protection Agency #510-R-05-001, "UST Systems:
41 Inspecting and Maintaining Sumps and Spill Buckets;" or

42 (2) U.S. Environmental Protection Agency #510-B-05-002, "Operating and
43 Maintaining Underground Storage Tank Systems: Practical Help and Checklists."

44 B. Owners and operators shall draw off water that has accumulated in the secondary
45 containment, including all sumps, within one week of a rainfall event, and shall remove any
46 other debris that has accumulated inside the secondary containment. Owners and operators shall

1 properly treat and dispose of any accumulated water with a visible sheen.

2 [20.5.5.11 NMAC - N, xx/xx/200x]

3 *[Note: requirements for secondary containment for USTs are much shorter and more limited*
4 *because fewer types of secondary containment are allowed according to federal law and*
5 *national codes/standards. Only double-walled tanks/piping with interstitial monitoring are*
6 *allowed, not concrete/steel containment or barrier systems. So there need not be any*
7 *requirement to maintain volume of secondary containment, as there is for ASTs.]*

8
9 20.5.5.40212 OPERATION, REPAIR AND MAINTENANCE OF VAULTS:

10 A. Owners and operators shall operate, maintain and repair the walls and floor of a
11 vault in accordance with the current edition of an industry standard or code of practice developed
12 by a nationally recognized association or independent testing laboratory approved in advance ~~in~~
13 ~~writing~~ by the department. The following may be used to comply with this requirement:

14 (1) Society of Protective Coating and National Association of Corrosion Experts
15 SSPC-TU2/NACE 6G197, “Design, Installation and Maintenance of Coating Systems for
16 Concrete used in Secondary Containment;”

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

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

20 B. Owners and operators shall visually inspect the interior of any vault from the
21 outside monthly, and annually shall enter and inspect the interior of the vault. Owners and
22 operators shall draw off any water that has accumulated in a vault within one week of a rainfall
23 event if the water is in contact with the tank or piping (but need not draw off water only in
24 contact with a tank’s saddles, skid or other support), and shall remove any other debris that has
25 accumulated inside the vault and which is in contact with the tank, piping or saddle, skid or other
26 support. Owners and operators shall properly treat and dispose of any accumulated water with a
27 visible sheen. If a ~~basin~~ sump is located in the vault, owners and operators shall keep the liquid
28 trap free of water and debris. Owners and operators shall not install any valves in any ~~basin~~
29 sump in a vault.

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

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

35 E. For vaults with roofs, owners and operators shall properly maintain and repair the
36 roof of a vault in accordance with the current edition of an industry standard or code of practice
37 developed by a nationally recognized association or independent testing laboratory approved in
38 advance ~~in writing~~ by the department.

39 [20.5.5.12 NMAC - Rp, 20.5.5.402 NMAC, xx/xx/200x]

40
41 20.5.5.40313 OPERATION, REPAIR AND MAINTENANCE OF VENTING SYSTEMS:

42 Owners and operators shall operate, maintain and repair venting systems in accordance with the
43 current edition of an industry standard or code of practice developed by a nationally recognized
44 association or independent testing laboratory approved in advance ~~in writing~~ by the department.

45 At least monthly, owners and operators shall check emergency vents to ensure they are
46 operational. The following may be used to comply with this requirement: National Fire

1 Protection Association Standard 91, “Standard for Exhaust Systems for Air Conveying of
2 Vapors, Gases, Mists, and Noncombustible Particulate Solids.”

3 *[If not regularly checked and opened, emergency vents can rust and become nonfunctional -*
4 *inspectors have observed this in the field.]*

5 [20.5.5.13 NMAC - Rp, 20.5.5.403 NMAC, xx/xx/200x]

6
7 ~~[20.5.5.404-499] RESERVED~~

8
9 ~~20.5.5.500~~14 OPERATION AND MAINTENANCE OF SPILL AND OVERFILL
10 PREVENTION CONTROL:

11 A. Owners and operators shall ensure that releases due to spilling or overfilling do
12 not occur. Owners and operators shall ensure that all spill and overfill equipment required in
13 ~~Subsection A of 20.5.4.402~~33 NMAC is properly maintained and fully operational at all times.
14 Owners and operators shall ensure that the volume available in a tank is greater than the volume
15 of product to be transferred to the tank before the transfer is made and that the transfer operation
16 is monitored constantly to prevent overfilling and spilling. Owners and operators shall comply
17 with the transfer procedures described in the current edition of an industry standard or code of
18 practice developed by a nationally recognized association or independent testing laboratory
19 approved in advance ~~in writing~~ by the department. The following may be used to comply with
20 this requirement:

21 (1) National Fire Protection Association Standard 385, “Standard for Tank
22 Vehicles for Flammable and Combustible Liquids;”

23 (2) American Petroleum Institute Publication RP 1621, “Bulk Liquid Stock
24 Control at Retail Outlets;”

25 (3) National Fire Protection Association 30, “Flammable and Combustible
26 Liquids Code;”

27 (4) National Fire Protection Association 30A, “Code for Motor Fuel Dispensing
28 Facilities and Repair Garages;” ~~or~~

29 (5) Petroleum Equipment Institute Publication RP200, “Recommended Practices
30 for Installation of Above Ground Storage Systems for Motor Vehicle Fueling;” or

31 (6) International Code Council, "International Fire Code."

32 B. Owners and operators shall report, investigate, and clean up any spills and
33 overfills in accordance with ~~20.5.7.703~~ NMAC.

34 [20.5.5.14 NMAC - Rp, 20.5.5.500 NMAC, xx/xx/200x]

35
36 ~~20.5.5.504~~15 OPERATION AND MAINTENANCE OF CORROSION PROTECTION:

37 Owners and operators of steel storage tank systems with any steel tank or piping with corrosion
38 protection shall comply with the following requirements to ensure that releases due to corrosion
39 are prevented for as long as the storage tank system is used to store regulated substances.

40 A. Owners and operators shall operate and maintain corrosion protection systems to
41 continuously provide corrosion protection to all metal components of the system that routinely
42 contain regulated substances and are in contact with the ground or water. Owners and operators
43 shall operate and maintain corrosion protection systems in accordance with the current edition of
44 an industry standard or code of practice developed by a nationally recognized association or
45 independent testing laboratory approved in advance ~~in writing~~ by the department. The following
46 may be used to comply with this requirement:

1 (1) Steel Tank Institute, "Specification for Sti-P3 System of External Corrosion
2 Protection of Underground Steel Storage Tanks;"

3 (2) Underwriters Laboratories Standard 1746, "External Corrosion Protection
4 System for Steel Underground Storage Tanks;"

5 (3) Underwriters' Laboratories of Canada CAN4-S603-N85, "Standard for Steel
6 Underground Tanks for Flammable and Combustible Liquids;"

7 (4) Underwriters' Laboratories of Canada CAN4-G03.1-M85, "Standard for
8 Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible
9 Liquids;"

10 (5) Underwriters' Laboratories of Canada CAN4-S631-M84, "Isolating Bushings
11 for Steel Underground Tanks Protected with Coatings and Galvanic Systems;"

12 (6) National Association of Corrosion Engineers International Standard RP0-
13 0285, "Corrosion Control of Underground Storage Tanks Systems by Cathodic Protection;" or

14 (7) Underwriters Laboratories Standard 58, "Standard for Safety for Steel
15 Underground Tanks for Flammable and Combustible Liquids."

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

19 (1) Frequency. Owners and operators shall test all cathodic protection systems
20 within six months of installation and at least every three years thereafter or according to another
21 reasonable time frame approved in advance ~~in writing~~ by the department; and

22 (2) Inspection criteria. The criteria that are used to determine that cathodic
23 protection is adequate as required by this section must be in accordance with the current edition
24 of an industry standard or code of practice developed by a nationally recognized association or
25 independent testing laboratory approved in advance by the department.

26 (3) The following may be used to comply with this requirement:

27 (a) National Association of Corrosion Engineers International RP0285,
28 "Corrosion Control of Underground Storage Tank Systems by Cathodic Protection;"

29 (b) National Fire Protection Association 30, "Flammable and Combustible
30 Liquids Code;"

31 (c) National Fire Protection Association 30A "Code for Motor Fuel
32 Dispensing Facilities and Repair Garages;"

33 (d) American Petroleum Institute Publication RP 1615, "Installation of
34 Underground Petroleum Storage Systems;"

35 (e) American Petroleum Institute Publication RP 1632, "Cathodic
36 Protection of Underground Petroleum Storage Tanks and Piping Systems;"~~or~~

37 (f) National Association of Corrosion Engineers International RP0169,
38 "Control of External Corrosion on Underground or Submerged Metallic Piping Systems;" or

39 (g) International Code Council, "International Fire Code."

40 C. Owners and operators shall inspect storage tank systems with impressed current
41 cathodic protection systems every 60 days to ensure the equipment is running properly. Owners
42 and operators shall record the date, time, readings and results of each inspection in a log kept at
43 the facility, and indicate who performed each inspection.

44 D. For storage tank systems using cathodic protection, owners and operators shall
45 maintain records of the operation of the cathodic protection in accordance with 20.5.5.50419
46 NMAC to demonstrate compliance with the performance standards in this section. These

1 records shall provide the following:

2 (1) The results of the last three inspections required in Subsection C of this
3 section; and

4 (2) The results of testing from the last two inspections required in Subsection B of
5 this section.

6 [20.5.5.15 NMAC - Rp, 20.5.5.501 NMAC, xx/xx/200x]

7
8 ~~20.5.5.502~~16 COMPATIBILITY: Owners and operators shall use a storage tank system made
9 of or lined with materials that are compatible with the substance stored in the storage tank
10 system. Owners and operators storing alcohol blends shall use the current edition of an industry
11 standard or code of practice developed by a nationally recognized association or independent
12 testing laboratory approved in advance ~~in writing~~ by the department. The following may be used
13 to comply with this requirement:

14 A. American Petroleum Institute Publication RP1626, "Storing and Handling
15 Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations;" or

16 B. American Petroleum Institute Publication RP1627, "Storage and Handling of
17 Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations."

18 [20.5.5.16 NMAC - Rp, 20.5.5.502 NMAC, xx/xx/200x]

19
20 ~~20.5.5.503~~17 REPAIRS, REPLACEMENTS AND MODIFICATIONS: Owners and operators
21 of a storage tank system shall ensure that repairs, replacements and modifications will prevent
22 releases due to structural failure or corrosion as long as the storage tank system is used to store
23 regulated substances. ~~The repairs shall meet the following requirements:~~

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

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

31 (2) If, during an on-site inspection, the inspector determines that:

32 (a) any steel piping connected to a tank indicates corrosion,

33 (b) any rigid fiberglass-reinforced piping connected to a tank shows signs
34 of deterioration or failure, or

35 (c) any flexible piping connected to a tank shows any signs of deterioration
36 or failure,

37 then the owner and operator shall replace all piping connected to that tank, and shall inspect all
38 other piping at the same facility that is made of the same material to determine its condition prior
39 to returning the facility to operation.

40 B. Owners and operators shall properly conduct repairs, replacements and
41 modifications to storage tank systems in accordance with the current edition of an industry
42 standard or code of practice developed by a nationally recognized association or independent
43 testing laboratory approved in advance ~~in writing~~ by the department, and in accordance with the
44 manufacturer's instructions and recommended practices. The following may be used to comply
45 with this requirement:

46 (1) National Fire Protection Association 30, "Flammable and Combustible

1 Liquids Code;"

2 (2) American Petroleum Institute Publication RP 2200, "Repairing Crude Oil,
3 Liquefied Petroleum Gas, and Product Pipelines;"

4 (3) American Petroleum Institute Publication RP 1631, "Interior Lining and
5 Periodic Inspection of Underground Storage Tanks,"

6 (4) National Leak Prevention Association Standard 631, "Spill Prevention,
7 Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the
8 Addition of Cathodic Protection;"

9 (5) National Fire Protection Association 30A, "Code for Motor Fuel Dispensing
10 Facilities and Repair Garages;"

11 (6) Petroleum Equipment Institute Publication RP200, "Recommended Practices
12 for Installation of Above Ground Storage Systems for Motor Vehicle Fueling;"

13 (7) American Society for Testing and Materials ES40, "Emergency Standard
14 Practice for Alternative Procedures for the Assessment of Buried Steel Tanks Prior to the
15 Addition of Cathodic Protection;"

16 (8) American Petroleum Institute 570, "Piping Inspection Code: Inspection,
17 Repair, Alteration and Rerating of In-Service Piping Systems;" or

18 (9) American Petroleum Institute Standard 653, "Tank Inspection, Repair,
19 Alteration, and Reconstruction;"

20 (10) American Society of Mechanical Engineering Standard B31.1, "Process
21 Piping;" or

22 (11) International Code Council, "International Fire Code."

23 C. Owners and operators shall not internally line ASTs as a means of repairing an
24 AST.

25 ~~B. Owners and operators shall ensure that repairs and modifications to fiberglass-~~
26 ~~reinforced plastic tanks are made by the manufacturer's authorized representatives, or in~~
27 ~~accordance with the current edition of an industry standard or code developed by a nationally~~
28 ~~recognized association or independent testing laboratory approved in advance in writing by the~~
29 ~~department. [This is covered in Subsection B]~~

30 ~~C. Owners and operators shall replace metal pipe sections and fittings that have~~
31 ~~released a regulated substance as a result of corrosion or other damage. Owners and operators~~
32 ~~shall repair, modify and replace fiberglass pipes and fittings in accordance with the~~
33 ~~manufacturer's specifications. Owners and operators shall repair, modify and replace flexible~~
34 ~~piping according to manufacturer's instructions. [This is covered in Subsections A and B]~~

35 D. Owners and operators shall tightness test a storage tank system that has been
36 replaced, modified on completion of the modification prior to returning the system to service.
37 ~~Owners and operators shall tightness test storage tank systems that have been or repaired, prior~~
38 ~~to returning the system to service, in accordance with Subsection C of 20.5.6.60315 and~~
39 ~~20.5.6.10 NMAC [tank tightness testing for USTs and ASTs] and Subsection B of 20.5.6.60423~~
40 ~~NMAC [line tightness testing] within 30 days following the date of the completion of the repair~~
41 ~~except as provided in Paragraphs (1) through (3) of Subsection D of this section below:~~

42 (1) The repaired or modified tank is internally inspected in accordance with the
43 current edition of an industry ~~code or~~ standard or code of practice approved in advance ~~in writing~~
44 by the department;

45 (2) The repaired or modified portion of the storage tank system is monitored
46 monthly for releases in accordance with a method specified in ~~Subsections D through H of~~

1 ~~20.5.6.603~~ 20.5.6.16, 17, 18, 19, 20, 21, or 22 NMAC; or

2 (3) Owners and operators shall use an equivalent test method, which complies
3 with the current edition of an industry standard or code of practice developed by a nationally
4 recognized association or independent testing laboratory approved in advance in writing by the
5 department.

6 E. Upon completion of a modification or repair of any cathodically protected storage
7 tank system, owners and operators shall test the cathodic protection system in accordance with
8 Subsections B and C of ~~20.5.5.504~~15 NMAC to ensure that it is operating properly.

9 F. Owners and operators of a storage tank system shall maintain records of each
10 repair, replacement and modification for the remaining operating life of the storage tank system
11 that demonstrate compliance with the requirements of this section.

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

17 (1) ~~the~~ manufacturer's specifications;

18 (2) ~~the~~ current edition of an industry standard or code of practice developed by a
19 nationally recognized association or independent testing laboratory approved in advance by the
20 department; or

21 (3) ~~the~~ minimum thickness for the tank bottom shall never be less than one half of
22 the original bottom plate thickness and minimum thickness for the tank shall never be less than
23 0.1 inch.

24 H. Owners and operators shall meet all applicable installation requirements of 20.5.4
25 NMAC, including testing requirements, when repairing, replacing or modifying a storage tank
26 system involves installing new components. If any tank or piping of a tank system is replaced,
27 owners and operators shall follow all requirements for properly assessing the site for
28 contamination in compliance with 20.5.8 NMAC prior to installing the new components.
29 [20.5.5.17 NMAC - Rp, 20.5.5.503 NMAC, xx/xx/200x]

30
31 ~~20.5.5.504~~18 ~~REPORTING AND RECORD KEEPING:~~ Owners and operators of a storage
32 tank system shall cooperate fully with inspections, monitoring and testing conducted by the
33 department, as well as requests for document submission, testing, and monitoring by the owner
34 or operator pursuant to Section 9005 of Subtitle I of the federal Resource Conservation and
35 Recovery Act, as amended. ~~A. Reporting.~~ Owners and operators shall submit the following
36 information to the department:

37 A. (1) Registration for all storage tank systems in accordance with 20.5.2 NMAC,
38 which includes certification of installation for new UST and AST systems in accordance with
39 Subsection ~~BC~~ of ~~20.5.4.402~~37 NMAC;

40 B. (2) Reports of all releases in accordance with 20.5.2 NMAC, including and the
41 requirements in 20.5.7 NMAC for reporting suspected releases, in accordance with 20.5.7.701
42 NMAC, spills and overfills in accordance with 20.5.7.700 NMAC, and confirmed releases in
43 accordance with 20.5.7.702 NMAC;

44 C. (3) Corrective actions planned or taken as required by 20.5.12 and 20.5.13
45 NMAC; and

46 D. (4) A notification before storage tank system installation, replacement, repair or

1 modification in accordance with 20.5.5 NMAC, and before permanent closure or change-in-
2 service in accordance with 20.5.8 NMAC. It may not be feasible for owners and operators to
3 provide advance notice of emergency repairs; however, owners and operators shall provide
4 notice of emergency repairs as soon as possible after completing emergency repairs; and

5 E. ~~(5)~~ updated project drawings for any addition, replacement or modification of a
6 storage tank system.

7 [20.5.5.18 NMAC - Rp, 20.5.5.504 NMAC, xx/xx/200x]

8
9 20.5.5.19 RECORD KEEPING:

10 ~~B. Record keeping.~~ A. Owners and operators shall maintain the following information:

11 (1) a corrosion expert's analysis of site corrosion potential if corrosion protection
12 equipment is not used, in accordance with Paragraph (5) of Subsection A of 20.5.4.40012 NMAC
13 and Paragraph (3) of Subsection B of 20.5.4.40022 NMAC;

14 (2) documentation of operation of corrosion protection equipment in accordance
15 that demonstrate compliance with 20.5.5.50415 NMAC;

16 (3) documentation of storage tank system repairs, replacements and modifications
17 in accordance that demonstrate compliance with Subsection F of 20.5.503 NMAC;

18 (4) recent compliance with release detection requirements in accordance with
19 20.5.6.605 NMAC;

20 (5) results of the site investigation conducted at permanent closure in accordance
21 with 20.5.8.804 NMAC;

22 (6) inspection logs required by 20.5.5 NMAC and 20.5.6 NMAC;

23 (7) tank tightness, internal inspection and integrity test documents required by
24 20.5 NMAC; and

25 (8) any document approving any alternate method; and

26 (89) any other record or written approval required in 20.5.4 through 20.5.6
27 NMAC.

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

30 (1) at the storage tank site and immediately available for inspection by the
31 department or

32 (2) at a readily available alternative site and the records shall be provided for
33 inspection to the department upon request. If records are not available at a site during
34 inspection, owners and operators shall mail or send by facsimile transmission to the inspector
35 within 10 working days all records requested by the inspector.

36 (3) In the case of permanent closure records required under 20.5.8.804 NMAC,
37 owners and operators are also provided with the additional alternative of mailing closure records
38 to the department if they cannot be kept at the site or an alternative site as indicated above.

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

42 [20.5.5.19 NMAC - Rp, 20.5.5.504 NMAC, xx/xx/200x]

43
44 20.5.5.50520 INSPECTIONS, MONITORING AND TESTING:

45 A. For the purpose of enforcing the provisions of these regulations, any owner and
46 operator of a all owners and operators of storage tanks shall, upon the request of the secretary or

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

8 (1) ~~to~~ enter at reasonable times any establishment or place where a storage tank is
9 located;

10 (2) ~~to~~ inspect the storage tank system and obtain samples of its contents; and

11 (3) ~~to~~ conduct monitoring or testing of the tanks, associated equipment, contents,
12 or surrounding soils, air, surface water, or groundwater.

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

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

23 [20.5.5.20 NMAC - Rp, 20.5.5.505 NMAC, xx/xx/200x]

24
25 20.5.5.21 REQUIRED NOTIFICATION PRIOR TO REPLACEMENT, REPAIR AND

26 MODIFICATION: To ensure that ~~the~~ an inspector has an opportunity to be present during the
27 steps in ~~these~~ procedures which are important to the prevention of releases, owners, operators,
28 and certified tank installers shall give the department ~~oral~~ notice of the dates on which critical
29 junctures in the installation, replacement, repair, and modification or closure of the storage tank
30 system are to take place. Notice need not be provided for normal maintenance. The inspector
31 may require that critical junctures be performed from Monday through Friday during regular
32 business hours. ~~Notice shall be given as follows:~~

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

35 ~~(2) in the case of a repair, internal lining or other modification, including repair or~~
36 ~~modification of cathodic protection:~~

37 (1) ~~the~~ completion of the excavation of existing tanks or piping;

38 (2) ~~the~~ actual performance of the repair, lining or modification;

39 (3) any time during the project in which components of ~~the~~ piping are connected;

40 and

41 (4) any time during the project in which ~~the~~ a tank or its associated piping is
42 tested.

43 B. Owners, operators and certified tank installers shall give at least 30 days written
44 notice before the ~~installation~~ replacement, modification or repair of a storage tank system. It
45 may not be feasible for owners, operators, and certified tank installers to provide advance notice
46 of emergency repairs; however, owners, operators, and certified tank installers shall provide

1 notice of emergency repairs as soon as possible after completing emergency repairs. At a
2 minimum, the notice for replacements, modifications, and repairs shall contain the following
3 information:

- 4 (1) date the form is completed;
- 5 (2) facility name, number, address (with county), and telephone number;
- 6 (3) owner name, number, address, and telephone number;
- 7 (4) contractor name, address, and telephone number;
- 8 (5) description of type of replacement, modification or repair to be performed
9 (such as spill containment, overspill prevention, release detection, piping or other);
- 10 (6) expected date on which replacement, modification or repair will be performed;
- 11 (7) whether any part of the system is within 1,000 feet of a community water
12 system or a potable drinking water well; and
- 13 (8) signature of owner, operator or an authorized representative.

14 C. In addition to the written notices described in this section, ~~(2)~~ owners, operators
15 and certified tank installers shall give oral notice at least 24 hours in advance of the
16 commencement of the procedure.

17 D. ~~(3)~~ If owners, operators and certified tank installers are separate persons, only one
18 person is required to comply with the notice requirements of this Subsection; however, all parties
19 are liable in the event of noncompliance.

20 [20.5.5.21 NMAC - Rp, 20.5.5.505 NMAC, xx/xx/200x]

21 [The bureau provides an optional form that may be used for notification of replacement, repair
22 and modification.]

23
24 20.5.5.22 DEPARTMENT REVIEW AND APPROVAL OF PLANS, INSTALLATION,
25 OPERATION AND MAINTENANCE: Owners and operators shall view any inspection, review
26 or approval by the department as permission to proceed in accordance with all applicable rules,
27 codes and standards. Review and approval by the department shall not relieve any owner,
28 operator, or certified tank installer of his responsibility for compliance. If the department
29 overlooks any deficiencies or violations in the course of plan review or inspection provided in
30 20.5 NMAC, the department may later require correction and compliance.

31 [20.5.5.22 NMAC - N, xx/xx/2000x]

32
33 20.5.5.23 ALTERNATE METHODS:

34 A. If owners and operators want to operate, maintain, replace, repair or modify any
35 part of a storage tank system by another method, other than that specified in this part, in
36 accordance with the current edition of an industry standard or code of practice developed by a
37 nationally recognized association or independent testing laboratory, owners and operators shall
38 apply in writing to the department, shall provide supporting documentation, and shall not begin
39 to operate, maintain, replace, repair or modify the system, unless and until the department
40 approves the request in writing. At a minimum, the request for an alternate method shall contain
41 the following:

- 42 (1) date the form is completed;
- 43 (2) facility name, number, address (with county) and telephone number;
- 44 (3) owner name, number, address and telephone number;
- 45 (4) citation to regulation for which alternate method or material (such as type of
46 piping) is requested;

1 (5) brief description of the proposed alternate method or material; and
2 (6) justification of proposed alternate method or material, including citation to the
3 standard or code supporting its use, and demonstration of its equivalent protection of public
4 health, safety and welfare and the environment.

5 B. The department shall not grant the request unless owners and operators
6 demonstrate that the request will provide equivalent protection of public health, safety and
7 welfare and the environment.

8 [20.5.4.23 NMAC - N, xx/xx/200x]

9 *[Note: Although most requirements in these rules for written requests and approvals have been*
10 *deleted, these particular requests must be in writing, and must be approved by inspectors in*
11 *writing, because these are unusual situations that should be properly documented.]*

12 [The bureau provides an optional form that may be used to request approval of an alternate
13 method.]

14
15
16 HISTORY OF 20.5.5 NMAC:

17 Pre-NMAC History: The material in this part was derived from that previously filed with the
18 commission of public records - state records center and archives.

19 EIB/USTR-5, Underground Storage Tank Regulations-Part V-General Operating Requirements,
20 filed 9/12/88.

21 EIB/USTR-5, Underground Storage Tank Regulations-Part V-General Operating Requirements,
22 filed 2/14/89.

23 EIB/USTR-5, Underground Storage Tank Regulations-Part V-General Operating Requirements,
24 filed 8/4/89.

25 EIB/USTR-5, Underground Storage Tank Regulations-Part V-General Operating Requirements,
26 filed 6/12/90.

27
28 History of Repealed Material: 20 NMAC 5.5, Underground Storage Tanks - General Operating
29 Requirements (filed 2/27/97), repealed 8/15/03.

30
31 Other History:

32 EIB/USTR-5, Underground Storage Tank Regulations - Part V - General Operating
33 Requirements, filed 6/12/90, renumbered, reformatted and replaced by 20 NMAC 5.5,

34 Underground Storage Tanks - General Operating Requirements, effective 11/5/95;
35 20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements filed 10/6/95

36 replaced by 20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements,
37 effective 4/1/97;

38 20 NMAC 5.5, Underground Storage Tanks - General Operating Requirements, filed 2/27/97
39 was renumbered, reformatted and replaced by 20.5.5 NMAC, Petroleum Storage Tanks, General
40 Operating Requirements, effective 8/15/03.