

**REGULATORY IMPACT ANALYSIS FOR READOPTION AND AMENDMENTS TO
15A NCAC 02N UNDERGROUND STORAGE TANKS AND 15A NCAC 02O
FINANCIAL RESPONSIBILITY REQUIREMENTS FOR OWNERS AND OPERATORS
OF UNDERGROUND STORAGE TANKS**

July 5, 2019:

General Information

Agency/Commission: Environmental Management Commission

Department: Department of Environmental Quality, Division of Waste Management, Underground Storage Tank Section

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Title of Rule Set: Underground Storage Tanks and Financial Responsibility Requirements for Owners and Operators of Underground Storage Tanks

Citation: 15A NCAC 02N and 15A NCAC 02O

Authority: §143-215.94T provides authority for the Environmental Management Commission (EMC) to adopt and the Department of Environment Quality (DEQ) to implement and enforce rules relating to UST systems including standards and requirements applicable to existing and new UST systems. State rules governing UST systems are found in Title 15A, Subchapter 02N and 02O of the North Carolina Administrative Code.

Impact Summary: State government: Yes
Local government: Yes

Private Sector: Yes
Substantial impact: No
Federal Requirement or Impact: No

Proposed Rule-Making Schedule:

<i>Date</i>	<i>Action</i>
9/30/2019	Groundwater and Waste Management Committee meeting: Approval of proposed text to go to EMC
11/14/2019	EMC meeting: Approval of rule text and impact analysis for public comment
11/21/2019	File Notice with Office of Administrative Hearings
12/16/2019	Rules published in NC Register and Agency website; comment period begins
12/31/2019	Earliest date for public hearing
2/14/2020	Comment period end
3/12/2020	EMC meeting: Approval of Haring Officer's Report and Adoption of Rules
3/20/2020	File Rules with the Rules Review Commission
4/16/2020	RRC meeting: Approval of rule text
5/1/2020	Earliest effective date for rules

Necessity and Purpose of Rule Change

It is the responsibility of the Division of Waste Management (Division) Underground Storage Tank Section (Section) to implement and enforce rules relating to underground storage tank (UST) systems including standards and requirements applicable to existing and new UST systems under the statutory authority of General Statute 143-215.94T. State rules governing UST systems are found in Title 15A, Subchapters 02N and 02O of the North Carolina Administrative Code. These rules are proposed for readoption in accordance with G.S. 150B-21.3A and are required to be readopted by the deadline established by the Rules Review Commission of January 1, 2023.

The rules being readopted include proposed amendments to make technical and substantive changes to the rule language.

The technical changes being proposed will not result in any costs or benefits to the private sector, and state and local government. They include changes such as corrections; updates to information such as Department name, addresses, websites, and references;

clarification of vague or unclear language; typographical edits; citation updates; and removal of redundant or unnecessary language.

The substantive changes being proposed will likely result in some increased benefits but no additional costs to the private sector, and state and local government, and will be the focus of the rest of this analysis. The substantive changes are a result of legislative requirements enacted on June 27, 2018 and requests from stakeholders who wish to install a certain type of spill bucket and double-walled piping that are not currently allowed. UST equipment testing protocols and standards were updated to the most recent versions and additional protocols and standards were added to provide the resource documents to be used when implementing new requirements.

Fiscal Summary

The proposed amendments to 15A NCAC 02N .0901 (d), (k), and (o) are expected to result in a net economic benefit to the private sector, and state and local government, but are not expected to have a substantial impact.

The proposed amendments to 15A NCAC 02N .0901 (d) and (k) could result in a cost savings if a spill bucket installed before November 1, 2007 is replaced with a double-walled spill bucket with a mechanical liquid-detecting sensor that is monitored once every 30 days instead of a double-walled spill bucket with an electronic liquid-detecting sensor that is monitored continuously since the former does not rely on electrical conduit or a monitoring console to be installed, both of which currently add to the cost of replacing a spill bucket. However, this change could result in an increased number of releases if a spill bucket with a mechanical liquid-detecting sensor sustains damage that goes undetected until the next 30-day check.

The proposed amendments to 15A NCAC 02N .0901(o) would result in a cost savings since the proposed changes reduce the operability check frequency (and therefore the cost of testing) for overfill equipment installed on or after November 1, 2007, from annual to every three years. However, this could result in an increased number of releases if damaged or faulty equipment goes undetected for a longer period of time.

The proposed amendments to 15A NCAC 02N .0406(2), .0904(b), .0904(f), .0905(g), .0906(d), and .0906(e) increase the number of testing and inspection protocols available to UST owners and operators which offers them more flexibility, and also potentially reduces testing and inspection costs if lower-cost methods are available. There is no known evidence at this time that suggests any one of these methods offers more effective environmental protection than another.

An amendment to 15A NCAC 02N .0904(b) allows for installation of an alternative type of piping – piping with a stainless steel inner wall and a non-corroding outer wall. Owners may elect to use the new piping. It is not a requirement, so the amendment will not impose any additional costs. The new piping is believed to be as protective of the environment as the piping that is already allowed.

The proposed amendments to 15A NCAC 02N .0905(e) would make the rules consistent with current practices. There are no costs or benefits associated with these proposed amendments.

One proposed amendment to 15A NCAC 02N .0905(h) provides a cross-reference to a rule that is already in place. Another amendment clarifies a containment sump inspection requirement. There are no costs or benefits associated with these proposed amendments.

The proposed amendments to 15A NCAC 02N .0907 add to the list of national codes of practice and industry standards to reflect practices that are already in place in the industry. One of these additions will offer the regulated community more flexibility, and also potentially reduce testing and inspection costs if lower-cost methods are available. There is no known evidence at this time that suggests that one method offers more effective environmental protection than another.

No fiscal impacts to private households are expected as a result of the amendments.

The proposed amendments in 15A NCAC 02O will not have any economic impact. These amendments consist of only technical changes, so the economic impact will be zero.

Fiscal Analysis

Private Sector, and State and Local Government Impact

Types of Businesses or Facilities Potentially Affected by Rule Changes:

- Regulated UST facilities permitted by the Division

There are impacts to state and local governments associated with the proposed rule changes because in addition to private entities, state and local governments own and operate regulated USTs.

Benefits

The changes proposed in 15A NCAC 02N .0406(2) are a result of NCSL 2018-114 Sections 19.1(a)-(e), which required the EMC to adopt permanent rules to allow UST owners and operators to use all test methods and equipment that are approved by the EPA. The proposed amendments would incorporate that requirement in the rules pertaining to the periodic testing and inspection of spill prevention equipment, containment sumps used for interstitial monitoring of piping, and overfill prevention devices. The current rules allow for periodic testing and inspection methods that are developed by: the equipment manufacturer, a nationally-recognized association or independent laboratory, or requirements that the implementing agency determines are no less protective of human health and the environment. The proposed changes substitute the words “implementing agency” with “the US Environmental Protection Agency or the Division” in order to allow UST owners and operators to use all test methods and equipment that are approved by the EPA. This change increases the number of testing and inspection protocols available to UST owners and operators which offers them more flexibility, and also potentially reduces testing and inspection costs if lower-cost methods are approved by EPA. There is no known evidence at this time that suggests one method offers more effective environmental protection than another.

The changes proposed in 15A NCAC 02N .0901 (d) and (k) are included as a result of an industry request and pertain to federal regulations for spill buckets that were adopted in

June 2017 which require integrity testing every three years. The proposed amendments would allow spill buckets associated with tanks installed prior to November 1, 2007, to be replaced with double-walled spill buckets with mechanical liquid detecting sensors instead of repairing existing buckets with liners or replacing existing buckets with double-walled buckets with electronic liquid detecting sensors. This amendment could result in a cost savings since double-walled spill buckets with mechanical liquid-detecting sensors do not rely on electrical conduit and monitoring consoles being installed as do double-walled spill buckets with electronic liquid-detecting sensors. Replacing a single-walled bucket with a new double-walled spill bucket with mechanical liquid detecting sensor is most likely more protective of the environment than repairing that bucket with a liner. This is because the new spill bucket will be constructed of two walls. A defect in the inner wall will not lead to a release to the environment due to the added protection of the outer wall. Furthermore, the interstitial space of the new double-walled spill bucket will be checked at least once every 30 days for signs of a leak versus a lined single wall spill bucket which is not monitored for leaks at all. Conversely, using a bucket with a mechanical liquid detecting sensor is most likely less protective of the environment than replacing the original bucket with a double-walled spill bucket equipped with an electronic liquid-detecting sensor since buckets with electronic liquid-detecting sensors are continuously monitored for releases to the interstitial space versus once every 30 days. Since the proposed amendments add a spill bucket option but do not eliminate any options, it is not possible to say whether this amendment overall will increase or decrease environmental protection.

The changes proposed in 15A NCAC 02N .0901(o) are a result of NCSL 2018-114 Sections 19(a)-(e) which required the EMC to adopt permanent rules to change the requirement for checking the operability of overfill prevention equipment installed or replaced on or after November 1, 2007, from annually to every three years. The rules currently require checking the operability of overfill prevention equipment installed or replaced on or after November 1, 2007, annually, and checking the operability of overfill prevention equipment installed or replaced before November 1, 2007, every three years. Therefore, the proposed changes reduce the operability check frequency for overfill equipment installed on or after November 1, 2007, which represents a cost savings to UST owners and operators. One UST equipment service provider estimated the cost of the check to be \$100.00-\$300.00 per UST facility, depending on the number of USTs present and the type of overfill equipment being used. That could represent a cost savings to owners and operators of UST systems installed after November 1, 2007, of \$200-\$600 per UST facility over a three-year period. The proposed changes would reduce the frequency of operability checks for overfill equipment installed after November 1, 2007, which is less protective of the environment. Increasing the amount of time between operability checks could increase the amount of time it takes to discover damaged or faulty equipment which could lead to more releases.

The changes proposed in 15A NCAC 02N .0904 (b) are included as a result of an industry request to use a type of piping that has a stainless-steel inner wall and a non-corroding outer wall. The Rule as currently written requires that piping installed on or after November 1, 2007, be double-walled, constructed of non-corroding materials and meet the Underwriters Laboratory (UL) 971 standard. Both inner and outer walls of the double-walled pipe must be constructed of non-corroding material. The proposed changes would allow piping with a stainless-steel inner wall and a noncorrodible outer wall to be installed

so long as it meets the UL 971A standard, offering UST owners and operators more flexibility in selecting a piping type. This type of piping offers similar environmental protections to the type of piping currently approved since both are double-walled and continuously monitored.

The changes proposed in 15A NCAC 02N .0904(f) would delete a reference to Petroleum Equipment Institute/Recommended Practice (PEI/RP) 100 because it is an installation standard and does not list periodic testing requirements for primary and secondary piping. The amendments would add language clarifying that the primary pipe should be tested in accordance with US EPA line tightness test standards consistent with other UST rules. The amendments also broaden the testing protocols that can be used to test the secondary pipe by striking reference to PEI/RP 100 "Recommended Practice for Installation of Underground Liquid Storage Systems" and adding that the secondary pipe can be tested using a code of practice developed by a nationally recognized association in addition to manufacturers' procedures. The proposed amendment for testing secondary piping offers UST owners and operators more flexibility by adding alternative testing options and potentially reduces testing costs if lower-cost methods are available. There is no known evidence that suggests one method offers more effective environmental protection than another.

The changes proposed in 15A NCAC 02N .0905(e) would update two parts of this rule to be consistent with the current edition of PEI/RP 100 "Recommended Practice for Installation of Underground Liquid Storage Systems." The words "any change in water level shall be considered a failure of the integrity of the sump" would be deleted because containment sump manufacturers and PEI/RP 100 currently allow for some change in water level. In addition, the proposed amendments would change the minimum testing protocol by stating that the inner surface of the sump must be tested to at least four inches above the highest penetration instead of six inches. There are no costs or benefits associated with these proposed amendments.

The changes proposed in 15A NCAC 02N .0905(g) are a result of NCSL 2018-114 Sections 19.1(a)-(e), which required the EMC to adopt permanent rules to allow UST owners and operators to use all test methods and equipment that are approved by the EPA. The proposed amendments would incorporate that requirement in the rules pertaining to containment sumps installed on or after November 1, 2007. The current rules require containment sumps that are not monitored continuously on an uninterrupted basis for releases using vacuum, pressure or hydrostatic interstitial monitoring methods to be tested for tightness every three years following installation using methods that are developed by: the equipment manufacturer or PEI/RP100, "Recommended Practice for Installation of Underground Liquid Storage Systems." The proposed changes add more flexibility by eliminating the specific PEI/RP100 practice and adding the option to use a code of practice developed by a nationally-recognized association or independent laboratory, as well as requirements determined by the EPA or the Division to be no less protective of human health and the environment. This change increases the number of testing and inspection protocols available to UST owners and operators which offers them more flexibility, and potentially reduces testing and inspection costs if lower-cost methods are available. The proposed amendments also add a statement to allow repairs to sumps using a national standard developed by an independent association. The current rules do

not offer that as an option, so the amendment potentially increases the number of repair protocols available to UST owners and operators which offers them more flexibility, and potentially reduces costs if lower-cost repair options are available. There is no known evidence at this time that suggests one method offers more effective environmental protection than another.

The changes in 15A NCAC 02N .0905(h) are proposed to provide a cross reference to 15A NCAC 02N .0407, which was adopted on June 1, 2017 and which addresses annual inspections of containment sumps. Another amendment clarifies a containment sump inspection requirement. Since the proposed amendment clarifies rules for containment sumps which are found elsewhere in 15A NCAC 02N, there are no costs or benefits associated with these proposed amendments.

The changes proposed in 15A NCAC 02N .0906(d) would delete the reference to the specific national standard or code of practice (PEI/RP 100) and replace it with a generic reference in order to allow for additional national codes of practice or industry standards (such as PEI/RP1200) to be used as they are developed and published. The proposed amendment potentially increases the number of options available to UST owners and operators for testing spill buckets which offers them more flexibility, and also potentially reduces testing costs if lower-cost methods are available. There is no known evidence at this time that suggests one method offers more effective environmental protection than another.

The changes proposed in 15A NCAC 02N .0906(e) are a result of NCSL 2018-114 Sections 19.1(a)-(e), which required the EMC to adopt permanent rules to allow UST owners and operators to use all test methods and equipment that are approved by the EPA. The proposed amendments would incorporate that requirement in the rules pertaining to spill buckets installed on or after November 1, 2007. The current rules require spill buckets that are not monitored continuously on an uninterrupted basis for releases using vacuum, pressure or hydrostatic interstitial monitoring methods to be tested for tightness every three years following installation using methods that are developed by: the equipment manufacturer or PEI/RP100, "Recommended Practice for Installation of Underground Liquid Storage Systems." The proposed changes add more flexibility by eliminating the specific PEI/RP100 and adding the option to use a code of practice developed by a nationally-recognized association or independent laboratory, as well as requirements determined by the EPA or the Division to be no less protective of human health and the environment. This change increases the number of testing and inspection protocols available to UST owners and operators which offers them more flexibility, and also potentially reduces testing and inspection costs if lower-cost methods are available. There is no known evidence at this time that suggests one method offers more effective environmental protection than another.

The changes proposed in 15A NCAC 02N .0907 are to add PEI/RP 1200, UL 971A and NLPA to list of national codes of practice and industry standards that must be used for complying with the 02N .0900 rules. PEI/RP 1200 is proposed for adoption in this rule because it was not in existence when this rule was originally drafted, and it is consistent with current practices already in place in the industry. UL 971A is proposed for adoption in this rule to provide guidelines for the additional piping type (stainless-steel inner wall and a noncorrodible outer wall) proposed in 15A NCAC .0904(b) and discussed

previously in this document. NLPA is proposed for adoption in this rule in order to increase the number of testing and inspection protocols available to UST owners and operators which offers them more flexibility, and also potentially reduces testing and inspection costs if lower-cost methods are available. There is no known evidence at this time that suggests one method offers more effective environmental protection than another.

- 1 (2) total storage capacity, in gallons;
- 2 (3) the exact type of petroleum product (such as unleaded gasoline, No. 2 fuel oil, diesel) or hazardous
- 3 substance stored; and
- 4 (4) the year the tank was installed.

5 (b) The diagram shall be made available for inspection to authorized representatives of the Division.

6
7 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
8 *Eff. January 1, 1991;*
9 *Amended Eff. June 1, 2017;*
10 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6,*
11 *2018.*

12
13 **SECTION .0200 - PROGRAM SCOPE AND INTERIM PROHIBITION**

14
15 **15A NCAC 02N .0201 APPLICABILITY**

16 The regulations governing "Applicability" set forth in 40 CFR 280.10 (Subpart A) are hereby incorporated by
17 reference, except that:

- 18 (1) Underground storage tanks (UST) containing de minimis concentrations of regulated substances are
- 19 also subject to the requirements for permanent closure in Rules .0802 and .0803 of this Subchapter;
- 20 and
- 21 (2) UST systems that store fuel solely for use by emergency power generators installed on or after
- 22 November 1, 2007 shall also meet the requirements of Section .0900 of this Subchapter.

23
24 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
25 *Eff. January 1, 1991;*
26 *Amended Eff. June 1, 2017; November 1, 2007.*

27
28 **15A NCAC 02N .0202 INSTALLATION REQUIREMENTS FOR PARTIALLY EXCLUDED UST**
29 **SYSTEMS**

30 The regulations governing "Installation requirements for partially excluded UST systems" set forth in 40 CFR 280.11
31 (Subpart A) are hereby incorporated by reference.

32
33 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
34 *Eff. January 1, 1991;*
35 *Amended Eff. June 1, 2017.*

36
37 **15A NCAC 02N .0203 DEFINITIONS**

1 (a) The regulations governing "Definitions" set forth in 40 CFR 280.12 (Subpart A) are hereby incorporated by
2 reference, except that:

- 3 (1) 40 CFR 280.12 "UST system" shall be changed to read "'UST system' or 'Tank system' means an
4 underground storage tank, connected underground piping, underground ancillary equipment,
5 dispenser, and containment system, if any";
- 6 (2) 40 CFR 280.12 "Class A operator" shall not be incorporated by reference;
- 7 (3) 40 CFR 280.12 "Class B operator" shall not be incorporated by reference;
- 8 (4) 40 CFR 280.12 "Class C operator" shall not be incorporated by reference;
- 9 (5) 40 CFR 280.12 "Replaced" shall not be incorporated by reference; and
- 10 (6) 40 CFR 280.12 "Secondary containment or secondarily contained" shall not be incorporated by
11 reference.

12 (b) This Rule shall apply throughout this Subchapter except that:

- 13 (1) "Implementing agency" shall mean the "Division of Waste Management."
- 14 (2) "Division" shall mean the "Division of Waste Management."
- 15 (3) "Director" and "Director of the Implementing Agency" shall mean the "Director of the Division of
16 Waste Management."

17 (c) The following definitions shall apply throughout this Subchapter:

- 18 (1) "De minimis concentration" means the amount of a regulated substance that does not exceed one
19 percent (1%) of the capacity of a tank, excluding piping and vent lines.
- 20 (2) "Expediently emptied after use" means the removal of a regulated substance from an emergency
21 spill or overflow containment UST system within 48 hours after use of the UST system has ceased.
- 22 (3) "Previously closed" means:
 - 23 (A) An UST system from which all regulated substances had been removed, the tank had been
24 filled with a solid inert material, and tank openings had been sealed or capped prior to
25 December 22, 1988; or
 - 26 (B) An UST system removed from the ground prior to December 22, 1988.
- 27 (4) "Temporarily closed" means:
 - 28 (A) An UST system from which the product has been removed such that not more than one
29 inch of product and residue are present in any portion of the tank; or
 - 30 (B) Any UST system in use as of December 22, 1988 that complies with the provisions of 15A
31 NCAC 02N .0801.
- 32 (5) "Secondary containment" means a method or combination of methods of release detection for UST
33 systems that includes:
 - 34 (A) For tank installations or replacements completed prior to November 1, 2007, double-walled
35 construction and external liners (including vaults);
 - 36 (B) For underground piping installations or replacements completed prior to November 1,
37 2007, trench liners and double-walled construction;

1 (C) For tank installations or replacements completed on or after November 1, 2007, double-
2 walled construction and interstitial release detection monitoring that meet the requirements
3 of Section .0900 of this Subchapter; and

4 (D) For all other UST system component installations or replacements completed on or after
5 November 1, 2007, double-walled construction or containment within a liquid-tight sump
6 and interstitial release detection monitoring that meet the requirements of Section .0900 of
7 this Subchapter. Upon written request, the Division shall approve other methods of
8 secondary containment for connected piping that it determines are capable of meeting the
9 requirements of Section .0900 of this Subchapter.

10 (6) "Interstitial space" means the opening formed between the inner and outer wall of an UST system
11 with double-walled construction or the opening formed between the inner wall of a containment
12 sump and the UST system component that it contains.

13 (7) "Replace" means to remove an UST system or UST system component and to install another UST
14 system or UST system component in its place.

15 (8) "UST system component or tank system component" means any part of an UST system.

16
17 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*

18 *Eff. January 1, 1991;*

19 *Temporary Amendment Eff. January 7, 1991 For a Period of 180 Days to Expire on July 6, 1991;*

20 *Temporary Amendment Expired July 6, 1991;*

21 *Amended Eff. June 1, 2017; November 1, 2007.*

22
23 **SECTION .0300 - UST SYSTEMS: DESIGN, CONSTRUCTION, INSTALLATION, AND NOTIFICATION**

24
25 **15A NCAC 02N .0301 PERFORMANCE STANDARDS FOR UST SYSTEM INSTALLATIONS OR**
26 **REPLACEMENTS COMPLETED AFTER DECEMBER 22, 1988 AND BEFORE**
27 **NOVEMBER 1, 2007**

28 (a) The regulations governing "Performance standards for new UST systems" set forth in 40 CFR 280.20 (Subpart B)
29 are hereby incorporated by reference, except that:

30 (1) 40 CFR 280.20(a)(4) shall not be incorporated by reference;

31 (2) 40 CFR 280.20(b)(3) shall not be incorporated by reference; and

32 (3) UST system or UST system component installations or replacements completed on or after
33 November 1, 2007, shall also meet the requirements of Section .0900 of this Subchapter.

34 (b) No UST system shall be installed within 100 feet of a well serving a public water system, as defined in G.S. 130A-
35 313(10), or within 50 feet of any other well supplying water for human consumption.

36 (c) An UST system existing on January 1, 1991, and located within the area described in Paragraph (b) of this Rule
37 may be replaced with a new tank meeting the performance standards of 40 CFR 280.20 and the secondary containment

1 provisions of 40 CFR 280.42(a) through (d). The replacement UST system shall not be located nearer to the water
2 supply source than the UST system being replaced.

3 (d) Except as prohibited in Paragraph (b) of this Rule, an UST system shall meet the requirements for secondary
4 containment described at 40 CFR 280.42(a) through (d):

5 (1) Within 500 feet of a well serving a public water supply or within 100 feet of any other well supplying
6 water for human consumption; or

7 (2) Within 500 feet of any surface water classified as High Quality Water (HQW), Outstanding
8 Resource water (ORW), WS-I, WS-II or SA.

9 (e) An UST system or UST system component installation completed on or after November 1, 2007, to replace an
10 UST system or UST system component located within the areas described in Paragraphs (b), (c), or (d) of this Rule
11 shall meet the requirements of Section .0900 of this Subchapter.

12 (f) 40 CFR 280.20 Note to paragraph (d) is amended to include Petroleum Equipment Institute Publication RP1000,
13 "Recommended Practices for the Installation of Marina Fueling Systems."

14
15 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
16 *Eff. January 1, 1991;*
17 *Amended Eff. June 1, 2017; November 1, 2007.*
18

19 **15A NCAC 02N .0302 UPGRADING OF EXISTING UST SYSTEMS AFTER DECEMBER 22, 1998 AND**
20 **BEFORE NOVEMBER 1, 2007**

21 (a) The regulations governing "Upgrading of existing UST systems" set forth in 40 CFR 280.21 (Subpart B) are
22 hereby incorporated by reference, except that:

23 (1) existing UST systems located within the areas described in Rule .0301(b) and (d) of this Section
24 shall be upgraded in accordance with the provisions of 40 CFR 280.21(b) through (d) and shall be
25 provided with secondary containment as described in 40 CFR 280.42(a) through (d). An UST system
26 upgraded shall not be located nearer to a source of drinking water supply than its location prior to
27 being upgraded; and

28 (2) 40 CFR 280.21 Note to paragraph b(1)(ii)(C) shall not be incorporated by reference.

29 (b) Owners and operators shall submit notice of the upgrading of any UST system conducted in accordance with the
30 requirements of 40 CFR 280.21 to the Division, within 30 days following completion of the upgrading activity. The
31 notice shall include form "UST-8 Notification of Activities Involving Underground Storage Tank Systems," which is
32 set forth in Rule .0303(1)(b) of this Section.

33 (c) UST systems upgraded in accordance with 40 CFR 280.21 prior to January 1, 1991, are in compliance with this
34 Rule.

35 (d) An UST system or UST system component installation completed on or after November 1, 2007, to upgrade or
36 replace an UST system or UST system component described in Paragraph (a) of this Rule shall meet the performance
37 standards of Section .0900 of this Subchapter.

1
2 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
3 *Eff. January 1, 1991;*
4 *Amended Eff. June 1, 2017; November 1, 2007.*
5

6 **15A NCAC 02N .0303 NOTIFICATION REQUIREMENTS**

7 The regulations governing "Notification requirements" set forth in 40 CFR 280.22 (Subpart B) are hereby incorporated
8 by reference, except that:

- 9 (1) Owners and operators of an UST system shall submit to the Division, on forms provided by the
10 Division, a notice of intent to conduct any of the following activities:
- 11 (a) notice of installation of a new UST system or UST system component shall be in
12 accordance with Rule .0902 of this Subchapter;
 - 13 (b) notice of installation of a leak detection device installed outside of the outermost wall of
14 the tank and piping, such as vapor detection or groundwater monitoring devices, shall be
15 given at least 30 days before the activity begins. The notice shall be provided on form
16 "UST-8 Notification of Activities Involving Underground Storage Tank Systems," which
17 may be accessed free of charge at [http://deq.nc.gov/about/divisions/waste-](http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-section/forms)
18 [management/underground-storage-tanks-section/forms](http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-section/forms). Form "UST-8 Notification of
19 Activities Involving Underground Storage Tank Systems" shall include:
 - 20 (i) the same information provided in Appendix I to 40 CFR 280, except that Sections
21 X (2) and (3), and Section XI shall not be included on the form;
 - 22 (ii) operator identification and contact information;
 - 23 (iii) number of tank compartments and tank compartment identity, capacity, and
24 product stored;
 - 25 (iv) identity of tanks that are manifold together with piping;
 - 26 (v) stage I Vapor Recovery equipment type and installation date;
 - 27 (vi) corrosion protection methods for metal flexible connectors, submersible pumps,
28 and riser pipes;
 - 29 (vii) UST system and UST system component installation date, manufacturer, model,
30 and leak detection monitoring method;
 - 31 (viii) spill containment equipment installation date, manufacturer, model, and leak
32 detection monitoring method;
 - 33 (ix) overflow prevention equipment installation date, manufacturer, and model; and
 - 34 (x) leak detection equipment manufacturer and model;
 - 35 (c) notice of permanent closure or change-in-service of an UST system shall be given at least
36 30 days before the activity begins, unless a North Carolina Professional Engineer or North
37 Carolina Licensed Geologist retained by the owner or operator to provide professional

1 services for the tank closure or change-in-service submits the notice. A North Carolina
2 Professional Engineer or North Carolina Licensed Geologist may submit the notice at least
3 five business days before the activity begins. The notice shall be provided on form "UST-
4 3 Notice of Intent: UST Permanent Closure or Change-in-Service," which may be accessed
5 free of charge at [http://deq.nc.gov/about/divisions/waste-management/underground-
7 storage-tanks-section/forms](http://deq.nc.gov/about/divisions/waste-management/underground-
6 storage-tanks-section/forms). Form "UST-3 Notice of Intent: UST Permanent Closure or
8 Change-in-Service" shall include:

- 8 (i) owner identification and contact information;
- 9 (ii) site location information;
- 10 (iii) site contact information;
- 11 (iv) contractor and consultant identification and contact information;
- 12 (v) identity of UST systems to be permanently closed or that will undergo a change-
13 in-service;
- 14 (vi) for permanent closure, the proposed method of UST System closure – removal or
15 fill in-place;
- 16 (vii) for a change-in-service, the new contents to be stored;
- 17 (viii) proposed UST system closure or change-in-service date; and
- 18 (ix) signature of UST system owner;

19 (d) notice of a change of ownership of a UST system pursuant to 40 CFR 280.22(b) shall be
20 provided on form "UST-15 Change of Ownership of UST System(s)," which may be
21 accessed free of charge at [http://deq.nc.gov/about/divisions/waste-
23 management/underground-storage-tanks-section/forms](http://deq.nc.gov/about/divisions/waste-
22 management/underground-storage-tanks-section/forms). Form "UST-15 Change of
24 Ownership of UST System(s)" shall include:

- 24 (i) the same information provided in Appendix II to 40 CFR 280;
- 25 (ii) site location information;
- 26 (iii) notarized signature of the new owner of an UST system;
- 27 (iv) name and notarized signature of the previous owner of an UST system; and
- 28 (v) appended information shall include documentation of an UST system ownership
29 transfer such as a property deed or bill of sale and for a person signing the form
30 on behalf of another, such as an officer of a corporation, administrator of an estate,
31 representative of a public agency, or as having power of attorney, documentation
32 showing that the person can legally sign in such capacity.

33 (2) Owners and operators of UST systems that were in the ground on or after May 8, 1986, were required
34 to notify the Division in accordance with the Hazardous and Solid Waste Amendments of 1984,
35 Public Law 98-616, on a form published by the Environmental Protection Agency on November 8,
36 1985 (50-FR 46602) 46602), unless notice was given pursuant to Section 103(c) of CERCLA.
37 Owners or operators who have not complied with the notification requirements shall complete the

1 appropriate form "UST-8 Notification of Activities Involving Underground Storage Tank Systems"
2 and submit the form to the Division.

3 (3) Beginning October 24, 1988, any person who sells a tank intended to be used as an UST shall notify
4 the purchaser of such tank of the owner's notification obligations under Item (1) of this Rule.

5 (4) Any reference in 40 CFR Part 280 to the notification form in Appendix I shall refer to the North
6 Carolina notification form "UST-8 Notification of Activities Involving Underground Storage Tank
7 Systems".

8
9 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
10 Eff. January 1, 1991;
11 Amended Eff. June 1, 2017.

12
13 **15A NCAC 02N .0304 IMPLEMENTATION SCHEDULE FOR PERFORMANCE STANDARDS FOR**
14 **NEW UST SYSTEMS AND UPGRADING REQUIREMENTS FOR EXISTING**
15 **UST SYSTEMS LOCATED IN AREAS DEFINED IN RULE .0301(d)**

16 (a) The following implementation schedule shall apply only to owners and operators of UST systems located within
17 areas described in Rule .0301(d) of this Section. This implementation schedule shall govern tank owners and operators
18 in complying with the secondary containment requirements set forth in Rule .0301(d) for new UST systems and the
19 secondary containment requirements set forth in Rule .0302(a) for existing UST systems.

20 (1) All new UST systems and replacements to an UST system shall be provided with secondary
21 containment as of April 1, 2001.

22 (2) All steel or metal connected piping and ancillary equipment of an UST, regardless of date of
23 installation, shall be provided with secondary containment as of January 1, 2005.

24 (3) All fiberglass or non-metal connected piping and ancillary equipment of an UST, regardless of date
25 of installation, shall be provided with secondary containment as of January 1, 2008.

26 (4) All UST systems installed on or before January 1, 1991 shall be provided with secondary
27 containment as of January 1, 2008.

28 (5) All USTs installed after January 1, 1991, and prior to April 1, 2001, shall be provided with secondary
29 containment as of January 1, 2020. Owners of USTs located within 100 to 500 feet of a public water
30 supply well, if the well serves only a single facility and is not a community water system, may seek
31 a variance in accordance with Paragraphs (d) through (i) of this Rule.

32 (b) All owners and operators of UST systems shall implement the following enhanced leak detection monitoring as
33 of April 1, 2001. The enhanced leak detection monitoring shall consist of the following:

34 (1) An automatic tank gauging system for each UST;

35 (2) An electronic line leak detector for each pressurized piping system;

36 (3) One 0.1 gallon per hour (gph) test per month or one 0.2 gph test per week on each UST system;

1 (4) A line tightness test capable of detecting a leak rate of 0.1 gph, once per year for each suction piping
2 system. No release detection shall be required for suction piping that is designed and constructed in
3 accordance with 40 CFR 280.41(b)(1)(ii)(A) through (E);

4 (5) If the UST system is located within 500 feet of a public water supply well or within 100 feet of any
5 other well supplying water for human consumption, owners or operators shall sample the water
6 supply well at least once per year. The sample collected from the well shall be characterized in
7 accordance with:

8 (A) Standard Method 6200B, Volatile Organic Compounds Purge and Trap Capillary-Column
9 Gas Chromatographic/Mass Spectrometric Method, which is incorporated by reference
10 including subsequent amendments and editions, and may be obtained at
11 <http://www.standardmethods.org/> at a cost of sixty-nine dollars (\$69.00);

12 (B) EPA Method 625, Base/Neutrals and Acids, which is incorporated by reference including
13 subsequent amendments and editions, and may be accessed free of charge at
14 [http://water.epa.gov/scitech/methods/cwa/organics/upload/2007_07_10_methods_method](http://water.epa.gov/scitech/methods/cwa/organics/upload/2007_07_10_methods_method_organics_625.pdf)
15 [_organics_625.pdf](http://water.epa.gov/scitech/methods/cwa/organics/upload/2007_07_10_methods_method_organics_625.pdf) ; and

16 (C) If a waste oil UST system is present that does not meet the requirements for secondary
17 containment in accordance with 40 CFR 280.42(b)(1) through (4), the sample shall also be
18 analyzed for lead and chromium using Method 6010C, Inductively Coupled Plasma-
19 Atomic Emission Spectrometry, which is incorporated by reference including subsequent
20 amendments and editions, and may be accessed free of charge at
21 <http://www.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/6010c.pdf> or Method
22 6020A, Inductively Coupled Plasma-Mass Spectrometry, which is incorporated by
23 reference including subsequent amendments and editions, and may be accessed free of
24 charge at <http://www.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/6020a.pdf>; and

25 (6) The first sample collected in accordance with Subparagraph (b)(5) of this Rule shall be collected
26 and the results received by the Division by October 1, 2000, and yearly thereafter.

27 (c) An UST system or UST system component installation completed on or after November 1, 2007, to upgrade or
28 replace an UST system or UST system component as required in Paragraph (a) of this Rule shall meet the performance
29 standards of Section .0900 of this Subchapter.

30 (d) The Environmental Management Commission may grant a variance from the secondary containment requirements
31 in Subparagraph (a)(5) of this Rule for USTs located within 100 to 500 feet of a public water supply well if the well
32 serves only a single facility and is not a community water system. Any request for a variance shall be in writing by
33 the owner of the UST for which the variance is sought. The request for variance shall be submitted to the Director,
34 Division of Waste Management, 1646 Mail Service Center, Raleigh, NC 27699-1646. The Environmental
35 Management Commission shall grant the variance if the Environmental Management Commission finds facts to
36 support the following conclusions:

37 (1) The variance will not endanger human health and welfare or groundwater; and

1 (2) UST systems are operated and maintained in compliance with 40 CFR Part 280, Article 21A of G.S.
2 143B, and the rules in this Subchapter.

3 (e) The Environmental Management Commission may require the variance applicant to submit such information as
4 the Environmental Management Commission deems necessary to make a decision to grant or deny the variance.
5 Information that may be requested includes the following:

6 (1) Water supply well location, depth, construction specifications, and sampling results;

7 (2) Groundwater depth and flow direction; and

8 (3) Leak detection monitoring and testing results.

9 (f) The Environmental Management Commission may impose such conditions on a variance as the Environmental
10 Management Commission deems necessary to protect human health and welfare and groundwater. Conditions for a
11 variance may include the following:

12 (1) Increased frequency of leak detection and leak prevention monitoring and testing;

13 (2) Periodic water supply well sampling; and

14 (3) Increased reporting and recordkeeping.

15 (g) The findings of fact supporting any variance under this Rule shall be in writing and made part of the variance.

16 (h) The Environmental Management Commission may rescind a variance that was previously granted if the
17 Environmental Management Commission discovers through inspection or reporting that the conditions of the variance
18 are not met or that the facts no longer support the conclusions in Subparagraphs (d)(1) and (2) of this Rule.

19 (i) An owner of an UST system who is aggrieved by a decision of the Environmental Management Commission to
20 deny or rescind a variance or to conditionally grant a variance may commence a contested case by filing a petition
21 pursuant to G.S. 150B-23 within 60 days after receipt of the decision.

22
23 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
24 *Temporary Adoption Eff. May 1, 2000;*
25 *Eff. April 1, 2001;*
26 *Amended Eff. June 1, 2017; June 1, 2015; November 1, 2007.*

27 28 **SECTION .0400 - GENERAL OPERATING REQUIREMENTS**

29 30 **15A NCAC 02N .0401 SPILL AND OVERFILL CONTROL**

31 The regulations governing "Spill and overfill control" set forth in 40 CFR 280.30 (Subpart C) are hereby incorporated
32 by reference.

33
34 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
35 *Eff. January 1, 1991;*
36 *Amended Eff. June 1, 2017.*

1 **15A NCAC 02N .0402 OPERATION AND MAINTENANCE OF CORROSION PROTECTION**

2 The regulations governing "Operation and maintenance of corrosion protection" set forth in 40 CFR 280.31 (Subpart
3 C) are hereby incorporated by reference.

4
5 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
6 *Eff. January 1, 1991;*
7 *Amended Eff. June 1, 2017.*

8
9 **15A NCAC 02N .0403 COMPATIBILITY**

10 The regulations governing "Compatibility" set forth in 40 CFR 280.32 (Subpart C) are hereby incorporated by
11 reference.

12
13 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
14 *Eff. January 1, 1991;*
15 *Amended Eff. June 1, 2017.*

16
17 **15A NCAC 02N .0404 REPAIRS ALLOWED**

18 The regulations governing "Repairs Allowed" set forth in 40 CFR 280.33 (Subpart C) are hereby incorporated by
19 reference, except that the first sentence of 40 CFR 280.33(d) shall be read: "Repairs to secondary containment areas
20 of tanks and piping used for interstitial monitoring and to containment sumps used for interstitial monitoring of piping
21 shall have the secondary containment tested for tightness as directed by the Division within 30 days following the date
22 of completion of the repair." When determining the required test method, the Division may consider the following:

- 23 (1) installation date of the repaired UST system component;
24 (2) test methods that are third-party certified as being capable of detecting a 0.10 gallon per hour leak
25 rate with a probability of detection (Pd) of at least 95 percent and a probability of false alarm (Pfa)
26 of no more than 5 percent;
27 (3) codes of practice developed by a nationally recognized association;
28 (4) written manufacturer's guidelines for installation testing and testing after repairs are conducted; and
29 (5) test methods developed by an independent laboratory.

30
31 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
32 *Eff. January 1, 1991;*
33 *Amended Eff. June 1, 2017.*

34
35 **15A NCAC 02N .0405 REPORTING AND RECORDKEEPING**

36 (a) The regulations governing "Reporting and recordkeeping" set forth in 40 CFR 280.34 (Subpart C) are hereby
37 incorporated by reference.

1 (b) Owners and operators shall submit to the Division, within 30 days following completion, results of the site
2 investigation conducted:

3 (1) at permanent closure or change-in-service. The results of the site investigation for permanent closure
4 or change-in-service shall be reported in a format that includes the following:

5 (A) site location information;

6 (B) identification and contact information for the owner, operator, property owner, consultant,
7 contractor, and analytical laboratory;

8 (C) the same information provided in Appendix I to 40 CFR Part 280, Section X;

9 (D) information about any release discovered, including discovery date, estimated quantity of
10 petroleum or hazardous substance released, and the cause and source;

11 (E) information about any previous releases at the site, including owner or operator at the time
12 of the release, source, cause, and location relative to the current release;

13 (F) description of site characteristics, such as use of the site and surrounding area, drinking
14 water supplies, presence and location of water supply wells and surface water, depth to and
15 nature of bedrock, depth to groundwater, and direction of groundwater flow;

16 (G) date of permanent closure or change-in-service of an UST system and last contents stored;

17 (H) procedures and methods used to clean an UST system prior to permanent closure or
18 change-in-service;

19 (I) procedures and methods used to permanently close an UST system;

20 (J) description of condition of tank, piping, and dispenser;

21 (K) documentation of disposal of tank and its contents;

22 (L) description of condition of excavation, volume of soil excavation, soil type encountered,
23 type and source of backfill used, and any groundwater, free product, or bedrock
24 encountered in the excavation;

25 (M) method of temporary storage, sampling, and treatment or disposal of excavated soil;

26 (N) procedures and methods used for sample collection, field screening, and laboratory
27 analysis;

28 (O) quality assurance and quality control procedures and methods for decontamination of field
29 and sampling equipment and for sample handling, preservation, and transportation;

30 (P) field screening results and analytical results for samples collected, comparison of analytical
31 results to standards set forth in 15A NCAC 02L, and the presence and quantity of any free
32 product; and

33 (Q) maps and figures showing the site and surrounding topography, current and former UST
34 system locations, surface water, water supply wells, monitoring wells, types and locations
35 of samples, analytical results for samples, ground water flow direction, geologic boring
36 logs, and monitoring well construction specifications; or

1 (2) to insure compliance with the requirements for installation of vapor monitoring and groundwater
2 monitoring devices, as specified in 40 CFR 280.43(e)(1) through (e)(4) and 280.43(f)(1) through
3 (f)(5), respectively. The site investigation shall be conducted in accordance with Rule .0504 of this
4 Subchapter.

5 (c) Owners shall submit to the Division, on forms provided by the Division and within 30 days following completion:

6 (1) A description of the upgrading of any UST system conducted in accordance with requirements of
7 40 CFR 280.21. The description of upgrading shall be provided on form "UST-8 Notification of
8 Activities Involving Underground Storage Tank Systems," which is set forth in Rule .0303(1)(b) of
9 this Section;

10 (2) Certification of the proper operation of a corrosion protection system upon completion of testing in
11 compliance with 40 CFR 280.31; and

12 (A) Certification of proper operation and testing of a galvanic corrosion protection system shall
13 be provided on form "UST-7A Cathodic Protection System Evaluation for Galvanic
14 (Sacrificial Anode) Systems," which may be accessed free of charge at
15 [http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-](http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-section/forms)
16 [section/forms](http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-section/forms). Form "UST-7A Cathodic Protection System Evaluation for Galvanic
17 (Sacrificial Anode) Systems" shall include:

18 (i) owner identification and contact information;

19 (ii) site location information;

20 (iii) reason that a corrosion protection system was evaluated, including a routine test
21 within six months of corrosion protection system installation, a routine test every
22 three years following corrosion protection system installation, or a test following
23 a repair or modification;

24 (iv) corrosion protection tester's name, contact information, corrosion protection tester
25 certification number, certifying organization, and certification type;

26 (v) corrosion protection tester's evaluation, including pass, fail, or inconclusive;

27 (vi) corrosion expert's name, address, contact information, National Association of
28 corrosion Engineers certification number, and certification type or Professional
29 Engineer number, state, and specialty;

30 (vii) corrosion expert's evaluation, including pass or fail;

31 (viii) criteria for evaluation, including 850 millivolt on, 850 millivolt instant off, or 100
32 millivolt polarization;

33 (ix) action required as a result of the evaluation, including none, or repair and retest;

34 (x) description of UST system, including tank identity, product stored, tank capacity,
35 tank and piping construction material, and presence of metal flexible connectors;

36 (xi) description of any repair or modification made to the corrosion protection system;

- 1 (xii) site drawing, including the UST systems, on-site buildings, adjacent streets,
2 anodes and wires, reference electrode placement, and test stations;
- 3 (xiii) corrosion protection continuity survey, including location of fixed remote
4 reference electrode placement, structures evaluated using fixed remote instant-off
5 voltages or point-to-point voltage differences, and if structures are continuous or
6 isolated; and
- 7 (xiv) corrosion protection system survey, including locations of remote reference
8 electrode, structure evaluated, structure contact point, local reference cell
9 placement, local voltage, remote voltage, and if tested structure passed, failed, or
10 was inconclusive relative to the criteria for evaluation.
- 11 (B) Certification of proper operation and testing of an impressed current corrosion protection
12 system shall be provided on form "UST-7B Cathodic Protection System Evaluation for
13 Impressed Current Systems," which may be accessed free of charge at
14 [http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-](http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-section/forms)
15 [section/forms](http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-section/forms). Form "UST-7B Cathodic Protection System Evaluation for Impressed
16 Current Systems" shall include:
- 17 (i) owner identification and contact information;
- 18 (ii) site location information;
- 19 (iii) reason that a corrosion protection system was evaluated, including a routine test
20 within six months of corrosion protection system installation, a routine test every
21 three years following corrosion protection system installation, or a test following
22 a repair or modification;
- 23 (iv) corrosion protection tester's name, contact information, corrosion protection tester
24 certification number, certifying organization, and certification type;
- 25 (v) corrosion protection tester's evaluation, including pass, fail, or inconclusive;
- 26 (vi) corrosion expert's name, address, contact information, National Association of
27 Corrosion Engineers certification number, and certification type or Professional
28 Engineer number, state, and specialty;
- 29 (vii) corrosion expert's evaluation, including pass or fail;
- 30 (viii) criteria for evaluation, including 850 millivolt instant off or 100 millivolt
31 polarization;
- 32 (ix) action required as a result of the evaluation, including none or repair and retest;
- 33 (x) description of UST system, including tank identity, product stored, tank capacity,
34 tank and piping construction material, and presence of metal flexible connectors;
- 35 (xi) impressed current rectifier data, including rectifier manufacturer, model, serial
36 number rated DC output, shunt size, shunt factor, hour meter, tap settings, DC
37 output (gauge), and DC output (multimeter);

- (xii) impressed current positive and negative circuit measurements;
- (xiii) description of any repair or modifications made to the corrosion protection system;
- (xiv) site drawing, including the UST systems, on-site buildings, adjacent streets, anodes and wires, reference electrode placement, and test stations;
- (xv) corrosion protection continuity survey, including location of fixed remote reference electrode placement, structures evaluated using fixed remote instant-off voltages or point-to-point voltage differences, and if structures are continuous or isolated; and
- (xvi) corrosion protection system survey, including structure evaluated, structure contact point, reference cell placement, on voltage, instant off voltage, 100 millivolt polarization ending voltage and voltage change, and if the tested structure passed or failed relative to the criteria for evaluation.

(3) Certification of compliance with the requirements for leak detection specified in 40 CFR 280.40, 40 CFR 280.41, 40 CFR 280.42, 40 CFR 280.43, and 40 CFR 280.44. The certification shall specify the leak detection method and date of compliance for each UST. The certification of compliance with leak detection requirements shall be provided on form "UST-8 Notification of Activities Involving Underground Storage Tank Systems," which is set forth in Rule .0303(1)(b) of this Section.

History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6; Eff. January 1, 1991; Amended Eff. June 1, 2017.

15A NCAC 02N .0406 PERIODIC TESTING OF SPILL PREVENTION EQUIPMENT AND CONTAINMENT SUMPS USED FOR INTERSTITIAL MONITORING OF PIPING AND PERIODIC INSPECTION OF OVERFILL PREVENTION EQUIPMENT

The regulations governing "Periodic testing of spill prevention equipment and containment sumps used for interstitial monitoring of piping and periodic inspection of overfill prevention equipment" set forth in 40 CFR 280.35 (Subpart C) are hereby incorporated by reference, except ~~that~~ that:

(1) UST system or UST system component installations or replacements completed on or after November 1, 2007, shall meet the requirements of Section .0900 of this Subchapter.

(2) 40 CFR 280.35(a)(1)(ii)(C) shall be rewritten as follows: (C) Requirements determined by the US Environmental Protection Agency or the Division to be no less protective of human health and the environment than the requirements listed in Paragraphs (a)(1)(ii)(A) and (B) of this section.

1 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
2 *Eff. June 1, 2017.*

3
4 **15A NCAC 02N .0407 PERIODIC OPERATION AND MAINTENANCE WALKTHROUGH**
5 **INSPECTIONS**

6 The regulations governing "Periodic operation and maintenance walkthrough inspections" set forth in 40 CFR 280.36
7 (Subpart C) are hereby incorporated by reference.

8
9 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
10 *Eff. June 1, 2017.*

11
12 **SECTION .0500 - RELEASE DETECTION**

13
14 **15A NCAC 02N .0501 GENERAL REQUIREMENTS FOR ALL UST SYSTEMS**

15 The regulations governing "General requirements for all UST systems" set forth in 40 CFR 280.40 (Subpart D) are
16 hereby incorporated by reference.

17
18 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
19 *Eff. January 1, 1991;*
20 *Amended Eff. June 1, 2017.*

21
22 **15A NCAC 02N .0502 REQUIREMENTS FOR PETROLEUM UST SYSTEMS**

23 The regulations governing "Requirements for petroleum UST systems" set forth in 40 CFR 280.41 (Subpart D) are
24 hereby incorporated by reference, except that UST systems located within areas described in Rule .0301(d) of this
25 Subchapter shall meet the requirements for secondary containment described at 40 CFR 280.42(a) through (d) if the
26 UST system installation or replacement was completed before November 1, 2007. UST system or UST system
27 component installations or replacements completed on or after November 1, 2007, shall meet the secondary
28 containment requirements of Section .0900 of this Subchapter.

29
30 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
31 *Eff. January 1, 1991;*
32 *Amended Eff. June 1, 2017; November 1, 2007.*

33
34 **15A NCAC 02N .0503 REQUIREMENTS FOR HAZARDOUS SUBSTANCE UST SYSTEMS**

35 The regulations governing "Requirements for hazardous substance UST systems" set forth in 40 CFR 280.42 (Subpart
36 D) are hereby incorporated by reference, except that hazardous substance UST systems or UST system components

1 installed or replacements completed on or after November 1, 2007, shall meet the secondary containment requirements
2 of Section .0900 of this Subchapter.

3
4 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
5 *Eff. January 1, 1991;*
6 *Amended Eff. June 1, 2017; November 1, 2007.*

7
8 **15A NCAC 02N .0504 METHODS OF RELEASE DETECTION FOR TANKS**

9 (a) The regulations governing "Methods of release detection for tanks" set forth in 40 CFR 280.43 (Subpart D) are
10 hereby incorporated by reference, except that 40 CFR 280.43(f)(3), (f)(4), and (f)(5) shall not be adopted by reference.

11 (b) Wells used for monitoring or testing for free product in the groundwater shall be:

- 12 (1) Located as follows:
- 13 (A) for new installations, within and at the end of the excavation having the lowest elevation
14 and along piping at intervals not exceeding 50 feet; or
- 15 (B) for existing installations, in the excavation zone or as near to it as technically feasible and
16 installed in a borehole at least four inches larger than the diameter of the casing;
- 17 (2) A minimum of two inches in diameter. The number of wells installed shall be sufficient to detect
18 releases from the UST system;
- 19 (3) Equipped with a screen that extends from two feet below land surface to a depth of 20 feet below
20 land surface or two feet below the seasonal low water level, whichever is shallower. The screen
21 shall be designed and installed to prevent the migration of natural soils or filter pack into the well
22 while allowing the entry of regulated substances into the well under both high and low groundwater
23 level conditions;
- 24 (4) Surrounded with clean sand or gravel to the top of the screen, plugged and grouted the remaining
25 distance to finished grade with cement grout;
- 26 (5) Constructed of a permanent casing and screen material that is inert to the stored substance and is
27 corrosion resistant;
- 28 (6) Developed upon completion of installation until the water is clear and sediment free;
- 29 (7) Protected with a water-tight cover and lockable cap;
- 30 (8) Labeled as a liquid monitor well; and
- 31 (9) Equipped with a liquid leak detection device continuously operating on an uninterrupted basis; or
- 32 (A) For tanks storing petroleum products, tested at least once every 14 days with a device or
33 hydrocarbon-sensitive paste capable of detecting the liquid stored; or
- 34 (B) For tanks storing hazardous substances, sampled and tested at least once every 14 days for
35 the presence of the stored substance.

1 (c) Wells used for monitoring or testing for free product in the groundwater at new installations and constructed in
2 accordance with Paragraph (b) of this Rule shall be deemed to be permitted in accordance with the requirements of
3 15A NCAC 02C .0105.

4 (d) Any person completing or abandoning any well used for testing of vapors or monitoring for free product in the
5 groundwater shall submit the record required by 15A NCAC 02C .0114(b).

6 (e) Wells used for monitoring for the presence of vapors in the soil gas of the excavation zone shall be equipped with
7 a continuously operating vapor detection device or tested at least once every 14 days for vapors of the substance stored.
8

9 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
10 Eff. January 1, 1991;
11 Amended Eff. June 1, 2017.
12

13 **15A NCAC 02N .0505 METHODS OF RELEASE DETECTION FOR PIPING**

14 The regulations governing "Methods of release detection for piping" set forth in 40 CFR 280.44 (Subpart D) are hereby
15 incorporated by reference.
16

17 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
18 Eff. January 1, 1991;
19 Amended Eff. June 1, 2017.
20

21 **15A NCAC 02N .0506 RELEASE DETECTION RECORDKEEPING**

22 The regulations governing "Release detection recordkeeping" set forth in 40 CFR 280.45 (Subpart D) are hereby
23 incorporated by reference.
24

25 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
26 Eff. January 1, 1991;
27 Amended Eff. June 1, 2017.
28

29 **SECTION .0600 - RELEASE REPORTING, INVESTIGATION, AND CONFIRMATION**

31 **15A NCAC 02N .0601 REPORTING OF SUSPECTED RELEASES**

32 The regulations governing "Reporting of suspected releases" set forth in 40 CFR 280.50 (Subpart E) are hereby
33 incorporated by reference, except that the words "or another reasonable period specified by the implementing agency,"
34 shall be deleted from the first sentence.
35

36 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
37 Eff. January 1, 1991;

1 *Amended Eff. June 1, 2017.*

2
3 **15A NCAC 02N .0602 INVESTIGATION DUE TO OFF-SITE IMPACTS**

4 The regulations governing "Investigation due to off-site impacts" set forth in 40 CFR 280.51 (Subpart E) are hereby
5 incorporated by reference.

6
7 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
8 *Eff. January 1, 1991;*
9 *Amended Eff. June 1, 2017.*

10
11 **15A NCAC 02N .0603 RELEASE INVESTIGATION AND CONFIRMATION STEPS**

12 The regulations governing "Release investigation and confirmation steps" set forth in 40 CFR 280.52 (Subpart E) are
13 hereby incorporated by reference, except that in 40 CFR 280.52 the words "or another reasonable time period specified
14 by the implementing agency" shall not be adopted by reference. Upon written request, the Division may grant
15 additional time to investigate and confirm suspected releases as specified in 40 CFR 280.53. The request shall be made
16 to the Division prior to the expiration of the required time period. When considering such a request, the Division may
17 consider factors as follows:

- 18 (1) the extent to which the request for additional time is due to factors outside of the control of the tank
19 owner or operator;
- 20 (2) the previous history of the tank owner or operator submitting the report in complying with deadlines
21 established under the Commission's rules;
- 22 (3) the technical complications associated with investigating and confirming suspected releases; and
23 (4) the necessity for action to eliminate an imminent threat to public health or the environment.

24
25 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*
26 *Eff. January 1, 1991;*
27 *Amended Eff. June 1, 2017.*

28
29 **15A NCAC 02N .0604 REPORTING AND CLEANUP OF SPILLS AND OVERFILLS**

30 The regulations governing "Reporting and cleanup of spills and overfills" set forth in 40 CFR 280.53 (Subpart E) are
31 hereby incorporated by reference, except that:

- 32 (1) In 40 CFR 280.53(a) the words "or another reasonable time period specified by the implementing
33 agency" shall not be adopted by reference;
- 34 (2) In 40 CFR 280.53(b) the words "or another reasonable time period established by the implementing
35 agency" shall not be adopted by reference;
- 36 (3) In 40 CFR 280.53(a)(1) and (b), the words, "or another reasonable amount specified by the
37 implementing agency" shall not be adopted by reference; and

- 1 (4) Upon written request, the Division may grant additional time to submit the reports specified in 40
2 CFR 280.53. The request shall be made to the Division prior to the expiration of the required time
3 period. When considering such a request, the Division may consider factors as follows:
- 4 (a) the extent to which the request for additional time is due to factors outside of the control
5 of the tank owner or operator;
 - 6 (b) the previous history of the tank owner or operator submitting the report in complying with
7 deadlines established under the Commission's rules;
 - 8 (c) the technical complications associated with reporting and cleanup of spills and overfills;
9 and
 - 10 (d) the necessity for action to eliminate an imminent threat to public health or the environment.

11
12 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
13 Eff. January 1, 1991;
14 Amended Eff. June 1, 2017.

15
16 **SECTION .0700 - RELEASE RESPONSE AND CORRECTIVE ACTION FOR UST SYSTEMS**
17 **CONTAINING PETROLEUM OR HAZARDOUS SUBSTANCES**

18
19 **15A NCAC 02N .0701 GENERAL**

- 20 (a) The regulations governing "General" set forth in 40 CFR 280.60 (Subpart F) are hereby incorporated by reference.
21 (b) Any corrective action undertaken in accordance with this Section shall meet the requirements and standards
22 specified in 15A NCAC 02L.

23
24 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
25 Eff. January 1, 1991;
26 Amended Eff. September 1, 1992;
27 Temporary Amendment Eff. January 2, 1998;
28 Amended Eff. June 1, 2017; October 29, 1998.

29
30 **15A NCAC 02N .0702 INITIAL RESPONSE**

31 The regulations governing "Initial response" set forth in 40 CFR 280.61 (Subpart F) are hereby incorporated by
32 reference, except that the words "or within another reasonable period of time determined by the implementing agency"
33 in the first sentence shall not be adopted by reference.

34
35 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
36 Eff. January 1, 1991;
37 Amended Eff. June 1, 2017.

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15A NCAC 02N .0703 INITIAL ABATEMENT MEASURES AND SITE CHECK

The regulations governing "Initial abatement measures and site check" set forth in 40 CFR 280.62 (Subpart F) are hereby incorporated by reference, except that:

- (1) 40 CFR 280.62(a)(6) shall read, "Investigate to determine the possible presence of free product and begin free product removal within 14 days in accordance with 40 CFR 280.64." Upon written request, the Division may grant additional time to begin free product removal. The request shall be made to the Division prior to the expiration of the required time period. When considering such a request, the Division may consider factors as follows:
 - (a) the extent to which the request for additional time is due to factors outside of the control of the tank owner or operator;
 - (b) the previous history of the tank owner or operator submitting the report in complying with deadlines established under the Commission's rules;
 - (c) the technical complications associated with free product removal; and
 - (d) the necessity for action to eliminate an imminent threat to public health or the environment; and
- (2) In 40 CFR 280.62(b) the words, "or within another reasonable period of time determined by the implementing agency," shall not be adopted by reference.

History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6; Eff. January 1, 1991; Amended Eff. June 1, 2017.

15A NCAC 02N .0704 INITIAL SITE CHARACTERIZATION

The regulations governing "Initial site characterization" set forth in 40 CFR 280.63 (Subpart F) are hereby incorporated by reference, except that in 40 CFR 280.63(b) the words "or another reasonable period of time determined by the implementing agency" shall not be adopted by reference. Upon written request, the Division may grant additional time to submit the information collected in compliance with 40 CFR 280.63(a). The request shall be made to the Division prior to the expiration of the required time period. When considering such a request, the Division may consider factors as follows:

- (1) the extent to which the request for additional time is due to factors outside of the control of the tank owner or operator;
- (2) the previous history of the tank owner or operator submitting the report in complying with deadlines established under the Commission's rules;
- (3) the technical complications associated with an initial site characterization; and
- (4) the necessity for action to eliminate an imminent threat to public health or the environment.

1 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
2 Eff. January 1, 1991;
3 Amended Eff. June 1, 2017.
4

5 **15A NCAC 02N .0705 FREE PRODUCT REMOVAL**

6 The regulations governing "Free product removal" set forth in 40 CFR 280.64 (Subpart F) are hereby incorporated by
7 reference.
8

9 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
10 Eff. January 1, 1991;
11 Amended Eff. June 1, 2017.
12

13 **15A NCAC 02N .0706 INVESTIGATIONS FOR SOIL AND GROUNDWATER CLEANUP**

14 The regulations governing "Investigations for soil and groundwater cleanup" set forth in 40 CFR 280.65 (Subpart F)
15 are hereby incorporated by reference.
16

17 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
18 Eff. January 1, 1991;
19 Amended Eff. June 1, 2017.
20

21 **15A NCAC 02N .0707 CORRECTIVE ACTION PLAN**

22 The regulations governing "Corrective action plan" set forth in 40 CFR 280.66 (Subpart F) are hereby incorporated
23 by reference, except that 40 CFR 280.66(a) shall read: "After reviewing the information submitted in compliance with
24 40 CFR 280.61 through 40 CFR 280.63, the Division may require owners and operators to submit additional
25 information or to develop and submit a corrective action plan for responding to contaminated soils and groundwater.
26 If a plan is required, owners and operators must prepare a plan in accordance with the requirements specified in 15A
27 NCAC 02L."
28

29 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);
30 Eff. January 1, 1991;
31 Amended Eff. September 1, 1992;
32 Temporary Amendment Eff. January 2, 1998;
33 Amended Eff. June 1, 2017; October 29, 1998.
34

35 **15A NCAC 02N .0708 PUBLIC PARTICIPATION**

36 The regulations governing "Public participation" set forth in 40 CFR 280.67 (Subpart F) are hereby incorporated by
37 reference.

1
2 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
3 *Eff. January 1, 1991;*
4 *Amended Eff. June 1, 2017.*
5

6 **SECTION .0800 - OUT-OF-SERVICE UST SYSTEMS AND CLOSURE**
7

8 **15A NCAC 02N .0801 TEMPORARY CLOSURE**

9 The regulations governing "Temporary closure" set forth in 40 CFR 280.70 (Subpart G) are hereby incorporated by
10 reference.
11

12 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
13 *Eff. January 1, 1991;*
14 *Amended Eff. June 1, 2017.*
15

16 **15A NCAC 02N .0802 PERMANENT CLOSURE AND CHANGES-IN-SERVICE**

17 The regulations governing "Permanent closure and changes-in-service" set forth in 40 CFR 280.71 (Subpart G) are
18 hereby incorporated by reference, except that an UST system containing de minimis concentrations of a regulated
19 substance shall meet the closure requirements of this Rule within 12 months of the effective date of this Subchapter.
20

21 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
22 *Eff. January 1, 1991;*
23 *Amended Eff. June 1, 2017.*
24

25 **15A NCAC 02N .0803 ASSESSING THE SITE AT CLOSURE OR CHANGE-IN-SERVICE**

26 The regulations governing "Assessing the site at closure or change-in-service" set forth in 40 CFR 280.72 (Subpart G)
27 are hereby incorporated by reference, except that:

- 28 (1) references to methods and requirements shall include all applicable references and methods listed
29 in 15A NCAC 02N .0504; and
30 (2) the number and location of samples and method of their collection shall be determined in accordance
31 with procedures established by the Division. In establishing procedures, the Division may consider
32 factors such as:
33 (a) dimensions of the USTs;
34 (b) type of products stored in the USTs;
35 (c) method of closure;
36 (d) type of and length of associated product lines;
37 (e) number of associated dispensers;

- (f) number of associated containment sumps;
- (g) methods of field sample analysis and laboratory sample analysis;
- (h) potential for vapor intrusion;
- (i) proximity to surface waters; and
- (j) site conditions such as site geology and hydrology.

History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
Eff. January 1, 1991;
Amended Eff. June 1, 2017.

15A NCAC 02N .0804 APPLICABILITY TO PREVIOUSLY CLOSED UST SYSTEMS

The regulations governing "Applicability to previously closed UST systems" set forth in 40 CFR 280.73 (Subpart G) are hereby incorporated by reference.

History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
Eff. January 1, 1991;
Amended Eff. June 1, 2017.

15A NCAC 02N .0805 CLOSURE RECORDS

The regulations governing "Closure records" set forth in 40 CFR 280.74 (Subpart G) are hereby incorporated by reference.

History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
Eff. January 1, 1991;
Amended Eff. June 1, 2017.

**SECTION .0900 - PERFORMANCE STANDARDS FOR UST SYSTEM OR UST SYSTEM COMPONENT
INSTALLATION OR REPLACEMENT COMPLETED ON OR AFTER NOVEMBER 1, 2007**

15A NCAC 02N .0901 GENERAL REQUIREMENTS

(a) This Section applies to a UST system or UST system component installation or replacement completed on or after November 1, 2007.

(b) A UST system or UST system component shall not be installed or replaced within an area defined at 15A NCAC 02N .0301(b).

(c) A tank shall meet the requirements for secondary containment including interstitial release detection monitoring in accordance with this Rule.

1 (d) All UST system components other than tanks including connected piping, underground ancillary equipment,
2 dispensers, line leak detectors, submersible pumps, spill buckets, siphon bars, and remote fill pipes shall meet the
3 requirements for secondary containment including interstitial release detection monitoring in accordance with this
4 Rule. Spill buckets replaced on tanks installed prior to November 1, 2007 may comply with the interstitial release
5 detection monitoring requirements described at 15A NCAC 02N .0901(k). Gravity-fed vertical fill pipes, vapor
6 recovery, vent lines, and containment sumps are excluded from the secondary containment requirements in this Rule.

7 (e) A UST system design is required for installation or replacement of a UST system, UST, or connected piping. If
8 required by G.S. 89C, UST system designs must be prepared by a Professional Engineer licensed by the North Carolina
9 Board of Examiners for Engineers and Surveyors.

10 [Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined via letter dated December
11 20, 1993, that preparation of a UST system design constitutes practicing engineering under G.S. 89C.]

12 (f) If required by the equipment manufacturer, persons installing, replacing or repairing UST systems or UST system
13 components must be trained and certified by the equipment manufacturer or the equipment manufacturer's authorized
14 representative to install, replace or repair such equipment.

15 (g) UST systems or UST system components shall be installed, tested, operated, and maintained in accordance with
16 the manufacturer's specifications and the codes of practice, and industry standards described at 15A NCAC 02N .0907.

17 (h) UST systems or UST system components shall not be installed or replaced in areas where they will be in contact
18 with contaminated soil or free product.

19 (i) Secondary containment systems shall be designed, constructed, installed and maintained to:

- 20 (1) Detect the failure of the inner wall and outer wall for UST system components with double wall
21 construction;
- 22 (2) Contain regulated substances released from a UST system until they are detected and removed;
- 23 (3) Prevent a release of regulated substances to the environment outside of the containment system;
- 24 (4) Direct releases to a monitoring point or points;
- 25 (5) Provide a release detection monitoring device or monitoring method for the interstitial space;
- 26 (6) Continuously monitor the inner and outer walls of double-walled tanks for breaches of integrity
27 using pressure, vacuum or hydrostatic monitoring methods or monitor the interstitial space of
28 double-walled tanks for releases using an electronic liquid detecting sensor method along with
29 periodic testing as specified in Rule .0903(f);
- 30 (7) Continuously monitor the inner and outer walls of double-walled non-tank components for breaches
31 of integrity using pressure, vacuum, or hydrostatic methods, or monitor a non-tank component for
32 releases by using an electronic liquid detecting sensor placed in a containment sump and in the
33 interstitial space of a double-walled spill bucket along with periodic integrity testing as specified in
34 Rules ~~.0904(h)~~, .0904(f), ~~.0905(f)~~, .0905(g) and .0906(e); and
- 35 (8) Provide a printed record of release detection monitoring results and an alarm history for each month.

36 (j) Electronic liquid detecting sensors used to monitor the interstitial space of double-walled tanks and non-tank
37 components shall meet the following requirements:

- 1 (1) Electronic liquid detecting sensors used for tanks and spill buckets must be located at the lowest
2 point in the interstitial space. Electronic liquid detecting sensors used for containment sumps must
3 be located as specified in Rule .0905(d).
- 4 (2) A tank must have a method to verify that an electronic liquid detecting sensor is located at the lowest
5 point of the interstitial space. Verification of the sensor location must be available for inspection.
- 6 (3) Electronic liquid detecting sensors must detect the presence of any liquid in the interstitial space and
7 must activate an alarm when any type of liquid is detected.
- 8 (4) Any liquid detected in the interstitial space must be removed within 48 hours of discovery.

9 (k) Spill buckets replaced on tanks installed prior to November 1, 2007 may use mechanical liquid detecting sensors
10 for interstitial leak detection monitoring instead of electronic liquid detecting sensors. If a mechanical liquid detecting
11 sensor is used, then a spill bucket must comply with all spill bucket requirements of this Rule including 15A NCAC
12 .0906 except that 15A NCAC 02N .0901(i)(7) and (8) do not apply. In addition, the following specific requirements
13 must be met:

- 14 (1) Mechanical liquid detecting sensors must be located at the lowest point in the interstitial space.
- 15 (2) Mechanical liquid detecting sensors must detect the presence of any liquid in the interstitial space.
16 The presence of liquid must register on a gauge that can be viewed from within the spill bucket.
- 17 (3) Spill buckets must be monitored at least every 30 days. The interstitial leak detection monitoring
18 results must be documented for each month.
- 19 (4) Any liquid detected in the interstitial space must be removed within 48 hours of discovery.
- 20 (5) Spill buckets must be integrity tested every three years in accordance with 15A NCAC 02N .0906(e).

21 ~~(l)~~ (l) New or replacement dispensers shall be provided with under dispenser containment sumps and shall meet the
22 secondary containment requirements and performance standards of this Rule.

23 ~~(m)~~ (m) All release detection monitoring equipment shall be installed, calibrated, operated and maintained in accordance
24 with manufacturer's instructions. All release detection monitoring equipment shall be checked annually for
25 operability, proper operating condition and proper calibration in accordance with the manufacturers written guidelines.
26 The results of the last annual check must be recorded, maintained at the UST site or the tank owner or operator's place
27 of business, and made available for inspection.

28 ~~(n)~~ (n) Releases detected in an interstitial space shall be reported in accordance with Rule .0601 and investigated in
29 accordance with the manufacturers written guidelines. Any changes in the original physical characteristics or integrity
30 of a piping system or a containment sump must also be reported in accordance with Rule .0601 and investigated in
31 accordance with the manufacturer's written guidelines.

32 ~~(o)~~ (o) UST systems and UST system components shall also meet all of the installation requirements specified in 40
33 CFR 280.20(c), (d) and (e). In addition, overflow prevention equipment shall be ~~checked annually~~ inspected at least
34 once every three years for operability, proper operating condition and proper calibration in accordance ~~with the~~
35 ~~manufacturer's written guidelines.~~ with:

- 36 (1) Written requirements developed by the manufacturer;

1 (2) A code of practice developed by a nationally recognized association or independent testing
2 laboratory or

3 (3) Requirements determined by the United States Environmental Protection Agency or the Division to
4 be no less protective of human health and the environment than the requirements listed in Paragraph
5 (o)(1) or (o)(2) of this Rule. At a minimum, the inspection must ensure that overfill prevention
6 equipment is set to activate at the correct level specified in §40 CFR 280.20(c)(1)(ii) and will
7 activate when regulated substance reaches that level.

8 The results of the last ~~annual~~ triennial check must be recorded, maintained at the UST site or the tank owner or
9 operator's place of business, and made available for inspection.

10
11 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
12 *Eff. November 1, 2007;*
13 *Amended Eff. February 1, 2010.*

14
15 **15A NCAC 02N .0902 NOTIFICATION**

16 (a) Owners and operators must provide notification of installation or replacement of an UST system, UST, or
17 connected piping to the Division in accordance with 15A NCAC 02N .0303. The notice shall also include:

- 18 (1) An UST system design.
19 (2) Equipment to be installed including model and manufacturer and the materials of construction.
20 (3) Device or method to be used to allow piping to be located after it is buried underground.
21 (4) A site plan drawn to scale showing the proposed location of UST systems relative to buildings and
22 other permanent structures, roadways, utilities, other UST systems, monitoring wells, and water
23 supply wells used for human consumption within 500 feet.
24 (5) A schedule for UST system installation or replacement.

25 (b) Owners and operators must notify the Division at least 48 hours prior to the following stages of construction so
26 that the Division may perform an inspection of the installation:

- 27 (1) Pre-installation tightness testing of tanks; and
28 (2) Final tightness testing of piping before it is backfilled.

29 (c) Documents showing the following information shall be submitted to the Division within 30 days after UST system,
30 UST, or connected piping installation or replacement is completed and shall be maintained at the UST system site or
31 the owner's or operator's place of business for the life of the UST system. These records shall be transferred to a new
32 tank owner at the time of a transfer of tank ownership:

- 33 (1) Certification from the UST system installer containing:
34 (A) The UST system installer's name, address and telephone number; training and any
35 certification received from the manufacturer of the equipment that was installed or replaced
36 or the equipment manufacturer's authorized representative including any certification
37 number;

- 1 (B) An as-built diagram drawn to scale showing: the name and address of the UST system site;
2 the date of UST system, UST, or connected piping installation or replacement; the
3 equipment that was installed including model and manufacturer; the information described
4 at 15A NCAC 02N .0903(b); the method used to anchor a tank in the ground; if the
5 equipment has single-walled or double-walled construction; the year the piping was
6 manufactured and any production code; and the device or method used to allow piping to
7 be located after it is buried underground. The as-built diagram shall also show the location
8 of the installed or replaced UST systems relative to: buildings and other permanent
9 structures, utilities, monitoring wells and other UST systems located at the site; adjacent
10 roadways; and water supply wells used for human consumption within 500 feet;
- 11 (C) A listing of the manufacturer's written guidelines, codes of practice, and industry standards
12 used for installation; and
- 13 (D) A statement that the UST system was installed in accordance with the design and the
14 manufacturer's specifications.

- 15 (2) Manufacturer warranties;
16 (3) Any equipment performance claims; and
17 (4) Records of all tightness testing performed.
18

19 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
20 *Eff. November 1, 2007.*
21

22 **15A NCAC 02N .0903 TANKS**

- 23 (a) Tanks must be protected from external corrosion in accordance with 40 CFR 280.20(a)(1), (2), (3), or (5).
24 (b) Owners and operators of tanks installed in accordance with 40 CFR 280.20(a)(2) shall comply with all applicable
25 requirements for corrosion protection systems contained in this Subchapter.
- 26 (c) The exterior surface of a tank shall bear a permanent marking, code stamp, or label showing the following
27 information:
- 28 (1) The engineering standard used;
29 (2) The diameter in feet;
30 (3) The capacity in gallons;
31 (4) The materials of construction of the inner and outer walls of the tank, including any external or
32 internal coatings;
33 (5) Serial number or other unique identification number designated by the tank manufacturer;
34 (6) Date manufactured; and
35 (7) Identity of manufacturer.

1 (d) Tanks that will be reused shall be certified by the tank manufacturer prior to re-installation and meet all of the
2 requirements of this Section. Tank owners and operators shall submit proof of certification to the Division along with
3 a notice of intent (Rule .0902).

4 (e) Tanks shall be tested before and after installation in accordance with the following requirements:

5 (1) Pre- Installation Test - Before installation, the primary containment and the interstitial space shall
6 be tested in accordance with the manufacturers written guidelines and PEI/RP100, "Recommended
7 Practice for Installation of Underground Liquid Storage Systems." PEI/RP100, "Recommended
8 Practice for Installation of Underground Liquid Storage Systems" is hereby incorporated by
9 reference including subsequent amendments and editions. A copy may be obtained from Petroleum
10 Equipment Institute, P.O. Box 2380, Tulsa, Oklahoma 74101-2380 at a cost of ninety-five dollars
11 (\$95.00). The presence of soap bubbles or water droplets during a pressure test, any change in
12 vacuum beyond the limits specified by the tank manufacturer during a vacuum test, or any change
13 in liquid level in an interstitial space liquid reservoir beyond the limits specified by the tank
14 manufacturer, shall be considered a failure of the integrity of the tank.

15 (2) Post-installation Test – The interstitial space shall be checked for a loss of pressure or vacuum, or a
16 change in liquid level in an interstitial space liquid reservoir. Any loss of pressure or vacuum beyond
17 the limits specified by the tank manufacturer, or a change in liquid level beyond the limits specified
18 by the tank manufacturer, shall be considered a failure of the integrity of the tank.

19 (3) If a tank fails a pre-installation or post-installation test, tank installation shall be suspended until the
20 tank is replaced or repaired in accordance with the manufacturer's specifications. Following any
21 repair, the tank shall be re-tested in accordance with Subparagraph (e)(1) of this Rule if it failed the
22 pre-installation test and in accordance with Subparagraph (e)(2) of this Rule if it failed the post-
23 installation test.

24 (f) The interstitial spaces of tanks that are not monitored using vacuum, pressure, or hydrostatic methods shall be
25 tested for tightness before UST system start-up, between six months and the first anniversary of start-up, and every
26 three years thereafter. The interstitial space shall be tested using an interstitial tank tightness test method that is
27 capable of detecting a 0.10 gallon per hour leak rate with a probability of detection (Pd) of at least 95 percent and a
28 probability of false alarm (Pfa) of no more than 5 percent. The test method shall be evaluated by an independent
29 testing laboratory, consulting firm, not-for-profit research organization, or educational institution using the most recent
30 version of the United States Environmental Protection Agency's (EPA's) "Standard Test Procedures for Evaluating
31 Various Leak Detection Methods." EPA's "Standard Test Procedures for Evaluating Various Leak Detection Methods"
32 is hereby incorporated by reference including subsequent amendments and additions. A copy may be obtained by
33 visiting EPA's Office of Underground Storage Tank website: <http://www.epa.gov/OUST/pubs/protocol.htm>
34 <https://www.epa.gov/ust/standard-test-procedures-evaluating-various-leak-detection-methods> and may be accessed
35 free of charge. The independent testing laboratory, consulting firm, not-for-profit research organization, or
36 educational institution shall certify that the test method can detect a 0.10 gallon per hour leak rate with a Pd of at least
37 95 percent and a Pfa of no more than 5 percent for the specific tank model being tested. If a tank fails an interstitial

1 tank tightness test, it shall be replaced by the owner or operator or repaired by the manufacturer or the manufacturer's
2 authorized representative in accordance with manufacturer's specifications. Tank owners and operators shall report
3 all failed interstitial tank tightness tests to the Division within 24 hours. Failed interstitial tank tightness tests shall be
4 reported by fax to the Division of Waste Management, Underground Storage Tank Section, at (919) 715-1117.
5 Following any repair, the tank interstitial space shall be re-tested for tightness. The most recent interstitial tightness
6 test record shall be maintained at the UST site or the tank owner's or operator's place of business and shall be available
7 for inspection.

8
9 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
10 *Eff. November 1, 2007;*
11 *Amended Eff. June 1, 2015; February 1, 2010.*
12

13 **15A NCAC 02N .0904 PIPING**

14 (a) Piping, with the exception of flexible connectors and piping connections, shall be pre-fabricated with double-
15 walled construction. Any flexible connectors or piping connections that do not have double-walled construction shall
16 be installed in containment sumps that meet the requirements of 15A NCAC 02N .0905.

17 (b) ~~Piping~~ Piping, with the exception of metal flex connectors and piping connections, shall be constructed of ~~non-~~
18 ~~corroding materials.~~ materials that prevent corrosion and meet the requirements of 15A NCAC 02N .0904(b)(1) or
19 15A NCAC 02N .0904(b)(2). Metal flexible connectors and piping connections shall be installed in containment
20 sumps that meet the requirements of 15A NCAC 02N .0905.

21 (1) (c) Piping shall Primary and secondary piping are constructed of non-corroding materials and comply
22 with the UL Underwriters Laboratories Standard (UL) 971 standard "Nonmetallic Underground
23 Piping for Flammable Liquids;" Liquids" that is in effect at the time the piping is installed. UL
24 971 standard "Nonmetallic "Standard for Nonmetallic Underground Piping for Flammable Liquids"
25 is hereby incorporated by reference including subsequent amendments and editions. A copy may
26 be obtained from Underwriters Laboratories, 333 Pfingsten Road, Northbrook, Illinois 60062-2096
27 at a cost of four hundred and two dollars (\$402.00).

28 (2) Primary piping is constructed of stainless steel and secondary piping is constructed of non-corroding
29 materials and complies with UL 971A "Outline of Investigation for Metallic Underground Fuel
30 Pipe." UL 971A "Outline of Investigation for Metallic Underground Fuel Pipe" is hereby
31 incorporated by reference including subsequent amendments and editions. A copy may be obtained
32 from Underwriters Laboratories, 333 Pfingsten Road, Northbrook, Illinois 60062-2096 at a cost of
33 two hundred and twenty-five dollars (\$225.00).

34 ~~(c)~~ Piping that is buried underground shall be constructed with a device or method that allows it to be located once
35 it is installed.

36 ~~(d)~~ Piping that conveys regulated substances under pressure shall also be equipped with an automatic line leak
37 detector that meets the requirements of 40 CFR 280.44(a).

1 ~~(e)~~(e) At the time of installation, the primary containment and interstitial space of the piping shall be initially tested,
2 monitored during construction, and finally tested in accordance with the manufacturers written guidelines and
3 PEI/RP100, "Recommended Practice for Installation of Underground Liquid Storage Systems." The presence of soap
4 bubbles or water droplets or any loss of pressure beyond the limits specified by the piping manufacturer during testing
5 shall be considered a failure of the integrity of the piping. If the piping fails a tightness test, it shall be replaced by the
6 owner or operator or repaired by the manufacturer or the manufacturer's authorized representative in accordance with
7 the manufacturer's written specifications. Following any repair, the piping shall be re-tested for tightness in accordance
8 with the manufacturers written guidelines and PEI/RP100, "Recommended Practice for Installation of Underground
9 Liquid Storage Systems."

10 ~~(f)~~(f) Piping that is not monitored continuously for releases using vacuum, pressure, or hydrostatic methods, shall be
11 tested for tightness every three years following installation. The primary containment shall be tested using a piping
12 tightness test method that is capable of detecting a 0.10 gallon per hour leak rate with a probability of detection (Pd)
13 of at least 95 percent and a probability of false alarm (Pfa) of no more than 5 percent. The test method shall be
14 evaluated by an independent testing laboratory, consulting firm, not-for-profit research organization, or educational
15 institution using the most recent version of the United States Environmental Protection Agency's (EPA's) "Standard
16 Test Procedures for Evaluating Various Leak Detection Methods." EPA's "Standard Test Procedures for Evaluating
17 Various Leak Detection Methods" is hereby incorporated by reference including subsequent amendments and
18 additions. The independent testing laboratory, consulting firm, not-for-profit research organization, or educational
19 institution shall certify that the test method can detect a 0.10 gallon per hour leak rate with a Pd of at least 95 percent
20 and a Pfa of no more than 5 percent. ~~and~~ The interstitial space of the piping shall be tested in accordance with the
21 ~~manufacturers~~ manufacturer's written guidelines ~~and PEI/RP100 "Recommended Practice for Installation of~~
22 ~~Underground Liquid Storage Systems."~~ or a code of practice developed by a nationally recognized association or
23 independent testing laboratory. If the piping fails a tightness test, it shall be replaced or repaired by the manufacturer
24 or the manufacturer's authorized representative in accordance with the manufacturer's specifications. Following any
25 repair, the piping shall be re-tested for tightness in accordance with Paragraph (f) of this Rule. The most recent periodic
26 tightness test record shall be maintained at the UST site or the tank owner or operator's place of business and shall be
27 available for inspection.

28
29 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
30 *Eff. November 1, 2007;*
31 *Amended Eff. June 1, 2015.*

32
33 **15A NCAC 02N .0905 CONTAINMENT SUMPS**

- 34 (a) Containment sumps must be constructed of non-corroding materials.
35 (b) Containment sumps must be designed and manufactured expressly for the purpose of containing and detecting a
36 release.
37 (c) Containment sumps must be designed, constructed, installed and maintained to prevent water infiltration.

1 (d) Electronic sensor probes used for release detection monitoring must be located no more than two inches above
2 the lowest point of the containment sump.

3 (e) At installation, containment sumps shall be tested for tightness after construction, but before backfilling. Tightness
4 testing shall be conducted in accordance with the ~~manufacturers~~ manufacturer's written guidelines and PEI/RP100,
5 "Recommended Practice for Installation of Underground Liquid Storage Systems." ~~Any change in water level shall~~
6 ~~be considered a failure of the integrity of the sump.~~ Other tightness test methods may be used if they are approved by
7 the Division. In approving a containment sump tightness testing method the Division shall consider the following
8 factors:

- 9 (1) The inner surface of the sump is tested to at least ~~six~~ four inches above the highest joint or
10 penetration fitting, whichever is higher; and
11 (2) The method is capable of detecting a fracture, perforation or gap in the sump within the specified
12 test period.

13 (f) If a containment sump fails an installation tightness test, the sump must be replaced or repaired by the manufacturer
14 or the manufacturer's authorized representative in accordance with the manufacturer's specifications. Following
15 replacement or repair, the containment sump must be re-tested for tightness in accordance with Paragraph (e) of this
16 Rule.

17 (g) Containment sumps that are not monitored continuously for releases using vacuum, pressure or hydrostatic
18 interstitial monitoring methods shall be tested for tightness every three years following installation in accordance with
19 the manufacturers written guidelines and PEI/RP100, "Recommended Practice for Installation of Underground Liquid
20 Storage Systems." with:

- 21 (1) Written requirements developed by the manufacturer;
22 (2) A code of practice developed by a nationally recognized association or independent testing
23 laboratory; or
24 (3) Requirements determined by the United States Environmental Protection Agency or the Division to
25 be no less protective of human health and the environment than the requirements listed in Paragraph
26 (g)(1) and (g)(2) of this Rule.

27 If a containment sump fails a periodic tightness test, the sump must be replaced in accordance with Paragraphs (a),
28 (b) and (c) of the Rule or repaired by the manufacturer or the manufacturer's authorized representative in accordance
29 with the manufacturer's specifications or a code of practice developed by a nationally recognized association or
30 independent testing laboratory. Following replacement or repair, the containment sump must be re-tested for tightness
31 in accordance with Paragraph (e) of this Rule. The last periodic tightness test record must be maintained at the UST
32 site or the tank owner or operator's place of business and must be readily available for inspection.

33 (g)(h) All containment sumps shall be visually inspected at least annually for the presence of water or regulated
34 substance. in accordance with 15A NCAC 02N .0407. Any water or regulated substance present in a sump at the time
35 of inspection must be removed from the sump within 48 hours of discovery. The visual inspection results must be
36 documented and must be maintained for at least one year at the UST site or the tank owner's or operator's place of
37 business and must be readily available for inspection.

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*History Note: Authority G.S. 143-215.3(a)(15); 143B-282(2)(h);
Eff. November 1, 2007.*

15A NCAC 02N .0906 SPILL BUCKETS

- (a) Spill buckets shall be pre-fabricated with double-walled construction.
- (b) Spill buckets must be protected from corrosion by being constructed of non-corroding materials.
- (c) Spill buckets must be designed, constructed, installed and maintained to prevent water infiltration.
- (d) After installation but before backfilling, the primary containment and interstitial space of the spill bucket shall be tested in accordance with the manufacturers written guidelines ~~and PEI/RP100, "Recommended Practice for Installation of Underground Liquid Storage Systems."~~or a code of practice developed by a nationally recognized association or independent testing laboratory. Any change in vacuum during a vacuum test or any change in liquid level in an interstitial space liquid reservoir beyond the limits specified by the equipment manufacturer shall be considered a failure of the integrity of the spill bucket. If the spill bucket fails a tightness test, it must be replaced or repaired by the manufacturer or the manufacturer's authorized representative in accordance with the manufacturer's specifications. Following any repair, the spill bucket must be re-tested for tightness in accordance with the manufacturers' written guidelines ~~and PEI/RP100, "Recommended Practice for Installation of Underground Liquid Storage Systems."~~or a code of practice developed by a nationally recognized association or independent testing laboratory
- (e) Spill buckets that are not monitored continuously for releases using vacuum, pressure or hydrostatic methods, must be tested for tightness every three years following installation. The primary containment and interstitial space of the spill bucket shall be tested in accordance ~~with the manufacturers' written guidelines and PEI/RP100 "Recommended Practice for Installation of Underground Liquid Storage Systems."~~with:
 - (1) Written requirements developed by the manufacturer;
 - (2) A code of practice developed by a nationally recognized association or independent testing laboratory; or
 - (3) Requirements determined by the United States Environmental Protection Agency or the Division to be no less protective of human health and the environment than the requirements listed in Paragraph (e)(1) and (e)(2) of this Rule.

If the spill bucket fails a tightness test, it must be replaced and tested in accordance with Paragraphs (a) through (d) or repaired by the manufacturer or the manufacturer's authorized representative in accordance with the manufacturer's specifications. Following any repair, the spill bucket must be re-tested for tightness in accordance with Paragraph (d) of this Rule. The last periodic tightness test record must be maintained at the UST site or the tank owner or operator's place of business and must be readily available for inspection.

*History Note: Authority G.S. 143-215.3(a)(15); 143B-282(2)(h);
Eff. November 1, 2007.*

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15A NCAC 02N .0907 NATIONAL CODES OF PRACTICE AND INDUSTRY STANDARDS

In order to comply with this Section, owners and operators must comply with either of the following standards:

- (1) The most recent versions of the following national codes of practice and industry standards applicable at the time of UST system installation or replacement shall be used to comply with this Section.
 - (a) American Concrete Institute (ACI) International 224R-89, "Control of Cracking in Concrete Structures." ACI International 224R-89, "Control of Cracking in Concrete Structures" is hereby incorporated by reference including subsequent amendments and editions. A copy may be obtained from ACI International, P.O. Box 9094, Farmington Hills, Michigan 48333-9094 at a cost of sixty-seven dollars and fifty cents (\$67.50).
 - (b) ACI International 350-06, "Environmental Engineering Concrete Structures." ACI International 350-06, "Environmental Engineering Concrete Structures" is hereby incorporated by reference including subsequent amendments and editions. A copy may be obtained from ACI International, P.O. Box 9094, Farmington Hills, Michigan 48333-9094 at a cost of one hundred sixty-six dollars and fifty cents (\$166.50).
 - (c) American Petroleum Institute (API) Standard 570, "Piping Inspection Code: Inspection Repair, Alteration and Re-rating of In-Service Piping Systems." API Standard 570, "Piping Inspection Code: Inspection Repair, Alteration and Re-rating of In-Service Piping Systems" is hereby incorporated by reference including subsequent amendments and editions. A copy may be obtained from API Publications, 15 Inverness Way East, M/S C303B, Englewood, Colorado 80112-5776 at a cost of one hundred eight dollars (\$108.00).
 - (d) API Recommended Practice 1110, "Recommended Practice for the Pressure Testing of Liquid Petroleum Pipelines." API Recommended Practice 1110, "Recommended Practice for the Pressure Testing of Liquid Petroleum Pipelines" is hereby incorporated by reference including subsequent amendments and editions. A copy may be obtained from API Publications, 15 Inverness Way East, M/S C303B, Englewood, Colorado 80112-5776 at a cost of fifty-five dollars (\$55.00).
 - (e) API Recommended Practice 1615, "Installation of Underground Petroleum Storage Systems." API Recommended Practice 1615, "Installation of Underground Petroleum Storage Systems" is hereby incorporated by reference including subsequent amendments and editions. A copy may be obtained from API Publications, 15 Inverness Way East, M/S C303B, Englewood, Colorado 80112-5776 at a cost of one hundred eight dollars (\$108.00).
 - (f) API Recommended Practice 1621, "Bulk Liquid Stock Control at Retail Outlets." API Recommended Practice 1621, "Bulk Liquid Stock Control at Retail Outlets" is hereby incorporated by reference including subsequent amendments and editions. A copy may be

1 obtained from API Publications, 15 Inverness Way East, M/S C303B, Englewood,
2 Colorado 80112-5776 at a cost of seventy-three dollars (\$73.00).

3 (g) API Recommended Practice 1631, "Interior Lining of Underground Storage Tanks." API
4 Recommended Practice 1631, "Interior Lining of Underground Storage Tanks" is hereby
5 incorporated by reference including subsequent amendments and editions. A copy may be
6 obtained from API Publications, 15 Inverness Way East, M/S C303B, Englewood,
7 Colorado 80112-5776 at a cost of seventy-six dollars (\$76.00).

8 (h) API Recommended Practice 1637, "Using the API Color Symbol System to Mark
9 Equipment and Vehicles for Product Identification at Service Stations and Distribution
10 Terminals." API Recommended Practice 1637, "Using the API Color Symbol System to
11 Mark Equipment and Vehicles for Product Identification at Service Stations and
12 Distribution Terminals" is hereby incorporated by reference including subsequent
13 amendments and editions. A copy may be obtained from API Publications, 15 Inverness
14 Way East, M/S C303B, Englewood, Colorado 80112-5776 at a cost of fifty-nine dollars
15 (\$59.00).

16 (i) American Society of Mechanical Engineers (ASME) International: B31.4-2006, "2006
17 Pipeline Transportation Systems for Liquid Hydrocarbons and other Liquids." ASME
18 International: B31.4-2006, "2006 Pipeline Transportation Systems for Liquid
19 Hydrocarbons and other Liquids" is hereby incorporated by reference including subsequent
20 amendments and editions. A copy may be obtained from ASME, 22 Law Drive, Box 2900,
21 Fairfield, NJ 07007-2900 at a cost of one hundred twenty-nine dollars (\$129.00).

22 (j) National Fire Protection Association (NFPA) 30, "Flammable and Combustible Liquids
23 Code." NFPA 30, "Flammable and Combustible Liquids Code" is hereby incorporated by
24 reference including subsequent amendments and editions. A copy may be obtained from
25 National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02169-
26 7471 at a cost of forty-two dollars and fifty cents (\$42.50).

27 (k) NFPA 30A, "Automotive and Marine Service Station Code." NFPA 30A, "Automotive and
28 Marine Service Station Code" is hereby incorporated by reference including subsequent
29 amendments and editions. A copy may be obtained from National Fire Protection
30 Association, 1 Batterymarch Park, Quincy, Massachusetts 02169-7471 at a cost of thirty-
31 three dollars and fifty cents (\$33.50).

32 (l) NFPA 329, "Handling Underground Releases of Flammable and Combustible Liquids."
33 NFPA 329, "Handling Underground Releases of Flammable and Combustible Liquids" is
34 hereby incorporated by reference including subsequent amendments and editions. A copy
35 may be obtained from National Fire Protection Association, 1 Batterymarch Park, Quincy,
36 Massachusetts 02169-7471 at a cost of thirty-three dollars and fifty cents (\$33.50).

- 1 (m) PEI: PEI/RP100, "Recommended Practice for Installation of Underground Liquid Storage
2 Systems."
- 3 (n) PEI: PEI/RP1200 "Recommended Practice for Testing and Verification of Spill, Overfill,
4 Leak Detection and Secondary Containment Equipment at UST Facilities." A copy may be
5 obtained from Petroleum Equipment Institute, P.O. Box 2380, Tulsa, Oklahoma 74101-
6 2380 at a cost of ninety-five dollars (\$95.00).
- 7 ~~(o)~~(o) Steel Tank Institute (STI) ACT 100 F894, "Specifications for External Corrosion
8 Protection of FRP Composite Steel Underground Storage Tanks." Steel Tank Institute
9 (STI) ACT 100 F894, "Specifications for External Corrosion Protection of FRP Composite
10 Steel Underground Storage Tanks" is hereby incorporated by reference including
11 subsequent amendments and editions. A copy may be obtained from Steel Tank Institute,
12 570 Oakwood Road, Lake Zurich, Illinois 60047 at a cost of fifty dollars (\$50.00).
- 13 ~~(p)~~(p) STI ACT 100-U F961, "Specifications for External Corrosion Protection of Composite
14 Steel Underground Storage Tanks." STI ACT 100-U F961, "Specifications for External
15 Corrosion Protection of Composite Steel Underground Storage Tanks" is hereby
16 incorporated by reference including subsequent amendments and editions. A copy may be
17 obtained from Steel Tank Institute, 570 Oakwood Road, Lake Zurich, Illinois 60047 at a
18 cost of fifty dollars (\$50.00).
- 19 ~~(q)~~(q) STI 922, "Specifications for Permatank." STI 922, "Specifications for Permatank" is
20 hereby incorporated by reference including subsequent amendments and editions. A copy
21 may be obtained from Steel Tank Institute, 570 Oakwood Road, Lake Zurich, Illinois
22 60047 at a cost of fifty dollars (\$50.00).
- 23 ~~(r)~~(r) Underwriters UL 58, "Steel Underground tanks for Flammable and Combustible Liquids."
24 UL 58, "Steel Underground tanks for Flammable and Combustible Liquids" is hereby
25 incorporated by reference including subsequent amendments and editions. A copy may be
26 obtained from Underwriters Laboratories, 333 Pfingsten Road, Northbrook, Illinois 60062-
27 2096 at a cost of four hundred forty-five dollars (\$445.00).
- 28 ~~(s)~~(s) UL 567, "Pipe Connectors for Petroleum Products and LP Gas." UL 567, "Pipe Connectors
29 for Petroleum Products and LP Gas" is hereby incorporated by reference including
30 subsequent amendments and editions. A copy may be obtained from Underwriters
31 Laboratories, 333 Pfingsten Road, Northbrook, Illinois 60062-2096 at a cost of eight
32 hundred eighty-five dollars (\$885.00).
- 33 ~~(t)~~(t) UL 971, ~~Nonmetallic~~ "Standard for Nonmetallic Underground Piping for Flammable
34 Liquids;"
- 35 (u) UL 971A, "Outline of Investigation for Metallic Underground Fuel Pipe."
- 36 ~~(v)~~(v) UL 1316, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum
37 Products, Alcohols, and Alcohol-Gasoline Mixtures." UL 1316, "Glass-Fiber-Reinforced

1 Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-
2 Gasoline Mixtures" is hereby incorporated by reference including subsequent amendments
3 and editions. A copy may be obtained from Underwriters Laboratories, 333 Pfingsten
4 Road, Northbrook, Illinois 60062-2096 at a cost of four hundred forty-five dollars
5 (\$445.00); or

6 ~~(w)~~(w) UL 1746, "External Corrosion Protection Systems for Steel Underground Storage Tanks."
7 UL 1746, "External Corrosion Protection Systems for Steel Underground Storage Tanks"
8 is hereby incorporated by reference including subsequent amendments and editions. A
9 copy may be obtained from Underwriters Laboratories, 333 Pfingsten Road, Northbrook,
10 Illinois 60062-2096 at a cost of eight hundred eighty-five dollars (\$885.00); or

- 11 (2) Other appropriate codes or standards applicable at the time of UST system installation or
12 replacement may be used provided they are developed by ACI, American National Standards
13 Institute (ANSI), API, ASME, ASTM, NFPA, National Leak Prevention Association (NLPA), PEI,
14 STI and UL.

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16 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);
17 Eff. November 1, 2007.

18
19 **SECTION .1000 – UST SYSTEMS WITH FIELD-CONSTRUCTED TANKS AND AIRPORT HYDRANT**
20 **FUEL DISTRIBUTION SYSTEMS**

21
22 **15A NCAC 02N .1001 DEFINITIONS**

23 The regulations governing "UST systems with field-constructed tanks and airport hydrant fuel distribution systems"
24 set forth in 40 CFR 280.250 (Subpart K) are hereby incorporated by reference.

25
26 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
27 Eff. June 1, 2017.

28
29 **15A NCAC 02N .1002 GENERAL REQUIREMENTS**

30 The regulations governing "General Requirements" set forth in 40 CFR 280.251 (Subpart K) are hereby incorporated
31 by reference.

32
33 *History Note:* Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;
34 Eff. June 1, 2017.

35
36 **15A NCAC 02N .1003 ADDITIONS, EXCEPTIONS, AND ALTERNATIVES FOR UST SYSTEMS WITH**
37 **FIELD-CONSTRUCTED TANKS AND AIRPORT HYDRANT SYSTEMS**

1 The regulations governing "Additions, exceptions, and alternatives for UST systems with field-constructed tanks and
2 airport hydrant systems" set forth in 40 CFR 280.252 (Subpart K) are hereby incorporated by reference, except that:

3 (1) piping associated with UST systems with field-constructed tanks less than or equal to 50,000 gallons
4 not part of an airport hydrant fueling system shall comply with the requirements of Section .0900 of
5 this Subchapter; and

6 (2) UST systems with field-constructed tanks and airport hydrant systems shall comply with the spill
7 and overfill prevention requirements of Section .0900 of this Subchapter.

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9 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h); 150B-21.6;*

10 *Eff. June 1, 2017.*

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1 ~~(b) Copies of such regulations can be made at these regional offices for ten cents (\$0.10) per page. Individual~~
2 ~~complete copies may be obtained from the U.S. Environmental Protection Agency, Office of Underground Storage~~
3 ~~Tanks, Post Office Box 6044, Rockville, Maryland 20850 for no charge.~~

4
5 *History Note: Authority G.S. ~~12-3-1(e); 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h);*
6 *Eff. July 1, 1992;*
7 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6,*
8 *~~2018.~~ 2018;*
9 *Amended Eff. [date].*

11 **15A NCAC 020 .0103 SUBSTITUTED SECTIONS**

12 (a) References to sections of the Federal Regulations incorporated by reference will refer to those sections and any
13 subsequent amendments and editions.

14 (b) References to 40 CFR 280.93 are to be taken as references to Rule .0204 of this Subchapter, with Paragraph
15 correspondence being: 40 CFR 280.93(a) corresponds to 15A NCAC ~~20~~ 020 .0204(a) and (b); 40 CFR 280.93(b)
16 corresponds to 15A NCAC ~~20~~ 020 .0204(c) and (d); 40 CFR 280.93(c) and (d) have no correspondence; and 40 CFR
17 280.93(e), (f), (g), and (h) correspond to 15A NCAC ~~20~~ 020 ~~.0204(f), .0204(g), (e), (f),~~ (h), and (i), respectively.

18 (c) References to 40 CFR 280.95 are to be taken as references to Rule .0302 of this Subchapter, with Paragraph
19 correspondence being: 40 CFR 280.95(a), (e), (f), and (g) correspond to 15A NCAC ~~20~~ 020 .0302(a), (c), (d), and
20 (e), respectively; 40 CFR 280.95(b) and (c) correspond to 15A NCAC ~~20~~ 020 .0302(b); 40 CFR 280.95(d)
21 corresponds to 15A NCAC ~~20~~ 020 .0302(f) and (g).

22
23 *History Note: Authority G.S. 143-215.94H; 143-215.94T; 150B-21.6;*
24 *Eff. July 1, 1992;*
25 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6,*
26 *~~2018.~~ 2018;*
27 *Amended Eff. [date].*

29 **SECTION .0200 - PROGRAM SCOPE**

31 **15A NCAC 020 .0201 APPLICABILITY**

32 (a) The ~~provisions for regulations governing "Applicability" contained set forth~~ in 40 CFR 280.90 are hereby
33 incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions. Locations where this~~
34 ~~material is available are specified in Rule .0102 of this Subchapter.~~

35 (b) The Rules ~~contained~~ in this Subchapter apply to all dual usage tanks as defined in Rule .0203 of this Section.

36
37 *History Note: Authority G.S. 143-215.94A; 143-215.94H; 143-215.94T; 150B-21.6;*

1 *Eff. July 1, ~~1992~~, 1992:*

2 *Readopted Eff. [date].*

3
4 **15A NCAC 02O .0202 COMPLIANCE DATES**

5 The ~~provisions for regulations governing~~ "Compliance Dates" ~~contained set forth~~ in 40 CFR 280.91 are hereby
6 incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions.~~ ~~Locations where this~~
7 ~~material is available are specified in Rule .0102 of this Subchapter.~~

8
9 *History Note: Authority G.S. 143-215.94A; 143-215.94H; 150B-21.6;*

10 *Eff. July 1, ~~1992~~, 1992:*

11 *Readopted Eff. [date].*

12
13 **15A NCAC 02O .0203 DEFINITIONS**

14 (a) The definitions ~~contained set forth~~ in 15A NCAC ~~2N 02N~~ .0203 and 40 CFR 280.92 are hereby incorporated by
15 ~~reference~~ reference, ~~including any subsequent amendments and editions,~~ except for "Director of the Implementing
16 Agency", "Occurrence", and "Financial Reporting Year". ~~Locations where this material is available are specified in~~
17 ~~Rule .0102 of this Subchapter.~~

18 (b) The following definitions are defined for the purposes of this Subchapter:

- 19 (1) "Annual Operating Fee" is an annual fee required to be paid by the owner or operator of each
20 commercial underground storage tank, as defined in G.S. 143-215.94A, in use on or after January 1
21 of the year, beginning with 1989.
- 22 (2) "Dual Usage Tank" means an underground storage tank which has had varied usage which would
23 cause the tank to be considered an underground storage tank regulated in accordance with 15A
24 NCAC ~~2N 02N~~ during certain times and an unregulated tank during other times and for which both
25 the regulated and unregulated usages were integral to the operation or existence of the tank.
- 26 (3) "Director of the Implementing Agency" means the Director of the Division of ~~Environmental Waste~~
27 Management of the Department of ~~Environment, Health, and Natural Resources.~~ Environmental
28 Quality.
- 29 (4) "Financial reporting year" means the latest consecutive twelve-month period for which any of the
30 following reports used to support a financial test is prepared:
- 31 (A) a 10K report submitted to the SEC;
- 32 (B) an annual report of tangible net worth submitted to Dun and Bradstreet;
- 33 (C) annual reports submitted to the Energy Information Administration or the Rural
34 Electrification Administration; or
- 35 (D) a compilation report by a Certified Public Accountant or Certified Public Accounting Firm.
- 36 (5) "Occurrence" means one or more releases which result(s) in a single plume of soil, groundwater,
37 and/or surface water contamination (consisting of free product and/or associated dissolved

1 contaminants exceeding standards established under 15A NCAC ~~2L~~ 02L .0202 or any other
2 applicable laws, rules, or regulations) emanating from a given site.

3
4 *History Note: Authority G.S. 143-215.94A; 143-215.94H; 150B-21.6;*
5 *Eff. July 1, ~~1992~~, 1992;*
6 *Readopted Eff. [date].*
7

8 **15A NCAC 020 .0204 AMOUNT AND SCOPE OF REQUIRED FINANCIAL RESPONSIBILITY**

9 (a) Owners or operators of petroleum underground storage tanks located in North Carolina ~~must~~ shall demonstrate
10 financial responsibility for at least one million dollars (\$1,000,000) per occurrence for taking corrective action and for
11 compensating third parties for bodily injury and property damage caused by accidental releases arising from the
12 operation of petroleum underground storage tanks.

13 (b) Compliance with all laws, rules, and regulations relating to the Commercial Leaking Petroleum Underground
14 Storage Tank Cleanup Fund shall constitute demonstration of financial responsibility for that amount specified in
15 Paragraph (a) of this Rule which is in excess of the sum of the amounts required to be paid per occurrence by the
16 owner or operator for cleanup and for third-party claims.

17 (c) Owners or operators of petroleum underground storage tanks located in North Carolina ~~must~~ shall demonstrate
18 financial responsibility for taking corrective action and for compensating third parties for bodily injury and property
19 damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least
20 the following annual aggregate amounts:

- 21 (1) For owners or operators of one to 100 petroleum underground storage tanks, one million dollars
22 (\$1,000,000); and
23 (2) For owners or operators of 101 or more petroleum underground storage tanks, two million dollars
24 (\$2,000,000).

25 (d) If all laws, rules, and regulations relating to the Commercial Leaking Petroleum Underground Storage Tank
26 Cleanup Fund are complied with, the owner or operator may meet the financial responsibility requirements of
27 Paragraph (c) of this Rule by providing an annual aggregate financial assurance of at least the sum of the amounts
28 specified in Subparagraphs (d)(1), (2), and (3) of this Rule as follows, in addition to the assurance provided by the
29 Commercial Fund:

- 30 (1) The average maximum amount required to be paid by an owner or operator per occurrence for
31 cleanup as determined in accordance with Paragraph (e) of this Rule;
32 (2) The average maximum amount required to be paid by an owner or operator per occurrence for third
33 party claims as determined in accordance with Paragraph (e) of this Rule; and
34 (3) Three percent of the multiple of:
35 (A) the amount in Subparagraph (d)(1) of this Rule; and
36 (B) the number of tanks being covered.

1 (e) An owner or operator providing financial assurance for more than one underground storage tank where the various
2 tanks do not all require the same maximum amounts to be paid per occurrence for cleanup and/or third party claims
3 shall calculate an average maximum amount to be paid per occurrence as follows:

4 (1) Determine the maximum amount to be paid per occurrence for each underground storage tank being
5 assured;

6 (2) Sum the values determined in Subparagraph (e)(1) of this Rule and divide by the number of
7 underground storage tanks being assured.

8 (f) Owners or operators shall annually review the amount of aggregate assurance provided. The amounts of required
9 financial responsibility and annual aggregate assurance shall be adjusted at the time of the review to that required in
10 Paragraphs (a), (b), (c), and (d) of this Rule. All changes in status, including installations and closures, shall be
11 reported to the Department, and all fees due shall be paid in accordance with applicable laws, rules, and regulations.

12 (g) If an owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate
13 financial responsibility for different petroleum underground storage tanks, the annual aggregate required shall be
14 based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

15 (h) The amounts of assurance required under this Rule exclude legal defense costs.

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

18 (j) Assurance for petroleum underground storage tanks located in North Carolina ~~must~~ shall be provided separately
19 from that provided for petroleum underground storage tanks not located in North Carolina.

20
21 *History Note: Authority G.S. 143-215.94H; 143-215.94T;*
22 *Eff. July 1, ~~1992~~, 1992;*
23 *Readopted Eff. [date].*
24

25 SECTION .0300 - ASSURANCE MECHANISMS

27 15A NCAC 020 .0301 ALLOWABLE MECHANISMS AND COMBINATIONS OF MECHANISMS

28 The ~~provisions for regulations governing~~ "Allowable Mechanisms and Combinations of Mechanisms" ~~contained set~~
29 ~~forth~~ in 40 CFR 280.94 are hereby incorporated by ~~reference~~ reference, ~~including any subsequent amendments and~~
30 ~~editions. Locations where this material is available are specified in Rule .0102 of this Subchapter.~~ "Guarantee" and
31 "Surety Bond" are acceptable mechanisms in the State of North Carolina.

32
33 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
34 *Eff. July 1, ~~1992~~, 1992;*
35 *Readopted Eff. [date].*
36

37 15A NCAC 020 .0302 SELF INSURANCE

1 (a) Assurance of financial responsibility may be provided by an owner or operator or guarantor as a self-insurer if the
2 owner or operator has complied with all of the laws, rules, and regulations relative to the Commercial Leaking
3 Petroleum Underground Storage Tank Cleanup Fund and the owner or operator or guarantor either establishes a Trust
4 Fund as set out in Paragraph (h) of this Rule or qualifies to be a self-insurer by passing the financial test in Paragraph
5 (b) of this Rule or a financial test of 40 CFR 280.95.

6 (b) To qualify as an insurer, an owner, operator, or guarantor, individually or collectively, ~~must~~ shall meet the
7 following criteria based on year-end financial statements for the latest completed fiscal year.

8 (1) The owner or operator, or guarantor, individually or collectively ~~must~~ shall have a total tangible net
9 worth of at least:

10 (A) The sum of the amounts specified in Subparagraphs (b)(1)(A)(i) and (ii) of this Rule as
11 follows, not to exceed three million dollars (\$3,000,000) and not to be less than one
12 hundred fifty thousand dollars (\$150,000):

13 (i) the multiple of:

14 (I) the number of tanks being covered by this mechanism,

15 (II) the cleanup costs required to be paid by the owner or operator per
16 occurrence in accordance with G.S. 143-215.94B(b),

17 (III) the proportion of the required financial assurance required pursuant to
18 Rule .0204 of this Subchapter being covered by this mechanism, and

19 (IV) a constant representing an average value per tank calculated from 0.05
20 for each underground storage tank covered by this mechanism which is
21 in compliance with any performance standards required on December
22 22, 1998, and 0.18 for each underground storage tank covered by this
23 mechanism which is not in compliance with any performance standards
24 required on December 22, 1998.

25 (ii) two percent of the multiple of:

26 (I) the number of tanks being covered by this mechanism,

27 (II) the amount for third party claims required to be paid by the owner or
28 operator per occurrence in accordance with G.S. 143-215.94B(b), and

29 (III) the proportion of the required financial assurance required pursuant to
30 Rule .0204 of the Subchapter being covered by this mechanism;

31 (B) Any amount of tangible net worth used to assure financial responsibility for petroleum
32 underground storage tanks not located in North Carolina;

33 (C) Ten times the sum of the corrective action cost estimates, the current closure and
34 post-closure care cost estimates, and amount of liability coverage for Hazardous Waste
35 Management Facilities and Hazardous Waste Storage Facilities for which a financial test
36 is used to demonstrate financial responsibility to EPA under 40 CFR Parts 264.101,

1 264.143, 264.145, 265.143, 265.145, 264.147, and 265.147 or to a state implementing
2 agency under a state program authorized by EPA under 40 CFR Part 271; and

3 (D) Ten times the sum of current plugging and abandonment cost estimates for injection wells
4 for which a financial test is used to demonstrate financial responsibility to EPA under 40
5 CFR Part 144.63 or to a state implementing agency under a state program authorized by
6 EPA under 40 CFR Part 145.

7 (2) In addition to any other requirements of this Section, a Guarantor ~~must~~ shall have a net worth of at
8 least two hundred thousand dollars (\$200,000) greater than any tangible net worth used by the
9 guarantor in Subparagraph (b)(1) of this Rule.

10 (3) The owner or operator, or guarantor, individually or collectively, ~~must~~ shall each have a letter signed
11 by the chief financial officer, worded as specified in Paragraph (g) of this Rule, and must do one of
12 the following:

13 (A) Obtain annually a compilation report issued by an independent certified public accountant
14 or certified public accounting firm;

15 (B) File financial statements annually with the U.S. Securities and Exchange Commission, the
16 Energy Information Administration, or the Rural Electrification Administration; or

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

19 (4) The firm's year-end financial statements must be independently compiled and cannot include an
20 adverse accountant's report or a "going concern" qualification.

21 (c) If an owner or operator is acting as a self-insurer in accordance with Paragraph (b) of this Rule and finds that he
22 or she no longer meets the requirements of the test in Paragraph (b) of this Rule based on the year-end financial
23 statements, the owner or operator ~~must~~ shall obtain alternative coverage within 150 days of the end of the year for
24 which financial statements have been prepared.

25 (d) The Department may require reports of financial condition at any time from a guarantor and from an owner or
26 operator who is self insuring. If the Department finds, on the basis of such reports or other information, that the owner,
27 operator, or guarantor no longer meets the financial test requirements of Paragraph (b) of this Rule, the owner or
28 operator ~~must~~ shall obtain alternate coverage within 30 days after notification of such a finding.

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

33 (f) To demonstrate that it meets the financial test under Paragraph (b) of this Rule, the chief financial officer of each
34 owner or operator or guarantor ~~must~~ shall sign, within 120 days of the close of each financial reporting year, as defined
35 by the 12-month period for which financial statements used to support the financial test are prepared, a letter worded
36 exactly as in Paragraph (g) of this Rule, except that the instructions in brackets are to be replaced by the relevant
37 information and the brackets deleted.

1 (g) LETTER FROM CHIEF FINANCIAL OFFICER

2 I, [insert: name of chief financial officer], the chief financial officer of [insert: name and address of the owner or
3 operator, or guarantor] have prepared this letter in support of the use of [insert: "the financial test of self-insurance,"
4 and/or "guarantee"] to demonstrate financial responsibility for [insert: "taking corrective action" or "compensating
5 third parties for bodily injury and property damage"] caused by [insert: "sudden accidental releases" and/or
6 "nonsudden accidental releases"] in the amount of at least [insert: dollar amount] per occurrence and [insert: dollar
7 amount] annual aggregate arising from operating (an) underground storage tank(s).

8 Underground storage tanks at the following facilities are assured by this financial test by this [insert: "owner or
9 operator," or "guarantor"]:

10 [List or attach the following information for each facility: the name and address of the facility where tanks assured
11 by this financial test are located, facility number(s) assigned by the Department, and date(s) of last payment of
12 annual tank operating fee(s). If separate mechanisms or combinations of mechanisms, other than the Commercial
13 Leaking Petroleum Underground Storage Tank Cleanup Fund are being used to assure any of the tanks at this
14 facility, list each tank assured by this financial test.]

15 [When appropriate, include the following for Hazardous Waste Management Facilities, Hazardous Waste Storage
16 Facilities, and Injection Wells:

17 A {insert: "financial test," or "guarantee"} is also used by this {insert: "owner or operator," or "guarantor"} to
18 demonstrate evidence of financial responsibility in the following amounts under EPA regulations or state programs
19 authorized by EPA under 40 CFR Parts 271 and 145:

20 EPA Regulations	Amount
21 Closure (including <input type="checkbox"/> 264.143 and <input type="checkbox"/> 265.143)	\$ _____
22 Post-Closure Care (including <input type="checkbox"/> 264.145 and <input type="checkbox"/> 265.145)	\$ _____
23 Liability Coverage (including <input type="checkbox"/> 264.147 and <input type="checkbox"/> 265.147)	\$ _____
24 Corrective Action (including <input type="checkbox"/> 264.101(b))	\$ _____
25 Plugging and Abandonment (including <input type="checkbox"/> 44.63)	\$ _____
26 Total \$ _____]	

27 This [insert: "owner or operator," or "guarantor"] has not received an adverse report or a "going concern"
28 qualification from an independent accountant on his financial statements for the latest completed fiscal year.

29		
30	1. a. Number of USTs being covered	_____
31	b. Average maximum amount of cleanup costs	_____
32	(Rule .0204(d) (1))	
33	c. Average maximum amount of third-party costs	_____
34	(Rule .0204(d) (2))	
35	d. proportion covered	_____
36	e. constant (Rule .0302(b)(1)(A)(i))	_____
37	f. Cleanup Total (a x b x d x e)	\$ _____

1 g. Third-Party Total (0.02 x a x c x d) \$ _____

2 h. If Guarantor, list \$200,000 \$ _____

3 2. Tangible assets applied to USTs not in North Carolina \$ _____

4 3. Ten times the costs for Hazardous Waste Facilities and Injections Wells \$ _____

5 4. Sum of lines 1f, 1g, 1h, and 2 \$ _____

6 5. Total tangible assets \$ _____

7 6. Total liabilities [if any of the amount reported on line 4 is included in total liabilities,

8 you may deduct that amount from this line and add that amount to line 7] \$ _____

9 7. Tangible net worth [subtract line 6 from line 5] \$ _____

10 Yes No

11 8. Is line 7 at least [for an owner or operator: \$150,000; for a guarantor: \$350,000]? _____

12 9. Is line 7 equal to or greater than line 4? _____

13 10. Has a compilation report been issued by an certified public accountant or certified

14 public accounting firm? _____

15 11. Have financial statements for the latest fiscal year been filed with the Securities

16 and Exchange Commission? _____

17 12. Have financial statements for the latest fiscal year been filed with the Energy Information

18 Administration? _____

19 13. Have financial statements for the latest fiscal year been filed with the Rural Electrification

20 Administration? _____

21 14. Has financial information been provided to Dun and Bradstreet, and has Dun and

22 Bradstreet provided a financial strength rating of 4A or 5A? [Answer "Yes" only

23 if both criteria have been met] _____

24

25 I hereby certify that the wording of this letter is identical to the wording specified in 15A NCAC 20 .0302, as such

26 regulations were constituted on the date shown immediately below, and that the information contained herein is

27 complete and accurate.

28

29 [Signature of chief financial officer]

30 [Name]

31 [Title]

32 [Date]

33

34 (h) The ~~provisions for regulations governing~~ "Trust Fund" ~~contained set forth~~ in 40 CFR 280.102 are hereby

35 incorporated by reference ~~including any subsequent amendments and editions. Locations where this material is~~

36 ~~available are specified in Rule .0102 of this Subchapter.~~

37

1 *History Note:* Authority G.S. 58-2-205; 143-215.94H; 150B-21.6;
2 Eff. August 3, ~~1992~~, 1992;
3 Readopted Eff. [date].
4

5 **15A NCAC 020 .0303 GUARANTEE**

6 The provisions for regulations governing "Guarantee" ~~contained~~ set forth in 40 CFR 280.96 are hereby incorporated
7 by ~~reference~~ reference, including any subsequent amendments and editions. Locations where this material is available
8 are specified in Rule .0102 of this Subchapter.
9

10 *History Note:* Authority G.S. 143-215.94H; 150B-21.6;
11 Eff. July 1, ~~1992~~, 1992;
12 Readopted Eff. [date].
13

14 **15A NCAC 020 .0304 INSURANCE AND RISK RETENTION GROUP COVERAGE**

15 The provisions for regulations governing "Insurance and Risk Retention Group Coverage" ~~contained~~ set forth in 40
16 CFR 280.97 are hereby incorporated by ~~reference~~ reference, including any subsequent amendments and editions,
17 except that "licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines
18 insurer in one or more states" in ~~§~~ 280.97(b)(1), 280.97(b)(1), (b)(2), and (c) is replaced by "licensed, registered, or
19 otherwise authorized to provide insurance in North Carolina". Locations where this material is available are specified
20 in Rule .0102 of this Subchapter.
21

22 *History Note:* Authority G.S. 58-2-125; 58-22; 143-215.94H; 150B-21.6;
23 Eff. July 1, ~~1992~~, 1992;
24 Readopted Eff. [date].
25

26 **15A NCAC 020 .0305 SURETY BOND**

27 The provisions for regulations governing "Surety Bond" ~~contained~~ set forth in 40 CFR 280.98 are hereby incorporated
28 by ~~reference~~ reference, including any subsequent amendments and editions. Locations where this material is available
29 are specified in Rule .0102 of this Subchapter.
30

31 *History Note:* Authority G.S. 143-215.94H; 150B-21.6;
32 Eff. July 1, ~~1992~~, 1992;
33 Readopted Eff. [date].
34

35 **15A NCAC 020 .0306 LETTER OF CREDIT**

1 The ~~provisions for regulations governing~~ "Letter of Credit" ~~contained set forth~~ in 40 CFR 280.99 are hereby
2 incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions~~. ~~Locations where this~~
3 ~~material is available are specified in Rule .0102 of this Subchapter.~~

4
5 *History Note:* Authority G.S. 143-215.94H; 150B-21.6;
6 *Eff. July 1, ~~1992~~, 1992;*
7 *Readopted Eff. [date].*

8
9 **15A NCAC 02O .0307 STANDBY TRUST FUND**

10 The ~~provisions for regulations governing~~ "Standby Trust Fund" ~~contained set forth~~ in 40 CFR 280.103 are hereby
11 incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions~~. ~~Locations where this~~
12 ~~material is available are specified in Rule .0102 of this Subchapter.~~

13
14 *History Note:* Authority G.S. 143-215.94H; 150B-21.6;
15 *Eff. July 1, ~~1992~~, 1992;*
16 *Readopted Eff. [date].*

17
18 **15A NCAC 02O .0308 INSURANCE POOLS**

19 (a) Insurance Pools established by owners and operators may be used alone or in combination to demonstrate financial
20 assurance in accordance with Rules .0204 and .0301 of this Subchapter.

21 (b) To be an eligible mechanism, Insurance Pools ~~must~~ shall comply with the requirements of G.S. 143-215.94I and
22 any other requirements imposed by the Commissioner of Insurance of the State of North Carolina and any relevant
23 law, rule, or regulation.

24 (c) Each owner and operator provided financial assurance through an Insurance Pool ~~must~~ shall maintain a certificate
25 of insurance issued by the Insurance Pool listing, at least:

- 26 (1) the name and address of the member;
27 (2) the location of the facilities owned by that member where underground storage tanks are being
28 insured by the pool;
29 (3) the number of insured underground storage tanks at each facility;
30 (4) the capacity of each insured underground storage tank;
31 (5) the amount of insurance provided for each underground storage tank; and
32 (6) the name, address, and signature of the Administrator of the Insurance Pool.

33
34 *History Note:* Authority G.S. 143-215.94H; 143-215.94I;
35 *Eff. July 1, ~~1992~~, 1992;*
36 *Readopted Eff. [date].*

1 **15A NCAC 020 .0309 SUBSTITUTION OF FINANCIAL ASSURANCE MECHANISMS**
2 **15A NCAC 020 .0310 CANCELLATION OR NONRENEWAL BY A PROVIDER OF ASSURANCE**

3

4 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
5 *Eff. July 1, 1992;*
6 *Repealed Eff. June 1, 2017.*

7

8 **15A NCAC 020 .0311 LOCAL GOVERNMENT BOND RATING TEST**

9 The regulations governing "Local Government Bond Rating Test" set forth in 40 CFR 280.104 (Subpart H) are hereby
10 incorporated by reference.

11

12 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
13 *Eff. June 1, ~~2017~~ 2017;*
14 *Readopted Eff. [date].*

15

16 **15A NCAC 020 .0312 LOCAL GOVERNMENT FINANCIAL TEST**

17 The regulations governing "Local Government Financial Test" set forth in 40 CFR 280.105 (Subpart H) are hereby
18 incorporated by reference.

19

20 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
21 *Eff. June 1, ~~2017~~ 2017;*
22 *Readopted Eff. [date].*

23

24 **15A NCAC 020 .0313 LOCAL GOVERNMENT GUARANTEE**

25 The regulations governing "Local Government Guarantee" set forth in 40 CFR 280.106 (Subpart H) are hereby
26 incorporated by reference.

27

28 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
29 *Eff. June 1, ~~2017~~ 2017;*
30 *Readopted Eff. [date].*

31

32 **15A NCAC 020 .0314 LOCAL GOVERNMENT FUND**

33 The regulations governing "Local Government Fund" set forth in 40 CFR 280.107 (Subpart H) are hereby incorporated
34 by reference.

35

36 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
37 *Eff. June 1, ~~2017~~ 2017;*

1 Readopted Eff. [date].

2
3 **15A NCAC 020 .0315 SUBSTITUTION OF FINANCIAL ASSURANCE MECHANISMS**

4 The regulations governing "Substitution of Financial Assurance Mechanisms by Owners or Operators" set forth in 40
5 CFR 280.108 (Subpart H) are hereby incorporated by reference.

6
7 *History Note: Authority G.S. 1 43-21 5.94H; 150B-21.6;*

8 *Eff. June 1, ~~2017~~, 2017;*

9 Readopted Eff. [date].

10
11 **15A NCAC 020 .0316 CANCELLATION OR RENEWAL BY A PROVIDER OF ASSURANCE**

12 The regulations governing "Cancellation or Non-renewal by a Provider of Financial Assurance " set forth in 40 CFR
13 280.109 (Subpart H) are hereby incorporated by reference.

14
15 *History Note: Authority G.S. 1 43-21 5.94H; 150B-21.6;*

16 *Eff. June 1, ~~2017~~, 2017;*

17 Readopted Eff. [date].

18
19 **SECTION .0400 - RESPONSIBILITIES OF OWNERS AND OPERATORS**

20
21 **15A NCAC 020 .0401 REPORTING BY OWNER OR OPERATOR**

22 The ~~provisions for regulations governing "Reporting by Owner or Operator" contained set forth in 40 CFR 280.106~~
23 ~~280.110~~ are hereby incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions.~~
24 ~~Locations where this material is available are specified in Rule .0102 of this Subchapter.~~

25
26 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*

27 *Eff. July 1, ~~1992~~, 1992;*

28 Readopted Eff. [date].

29
30 **15A NCAC 020 .0402 RECORD KEEPING**

31 (a) The ~~provisions for regulations governing "Record Keeping" contained set forth in 40 CFR 280.107 280.111~~ are
32 hereby incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions.~~ ~~Locations where this~~
33 ~~material is available are specified in Rule .0102 of this Subchapter.~~

34 (b) In addition to the requirements incorporated in Paragraph (a) of this Rule, ~~the following are required as evidence~~
35 ~~of financial responsibility:~~ an owner or operator using an "Insurance Pool" shall maintain a copy of the signed
36 insurance certificate as specified in Rule .0308(c) of this Subchapter.

1 (1) ~~An owner or operator using an "Insurance Pool" must shall maintain a copy of the signed insurance~~
2 ~~certificate as specified in Rule .0308(c) of this Subchapter.~~

3 (2) ~~Each owner or operator must shall maintain copies of cancelled checks for payment of annual tank~~
4 ~~operating fees for the preceding three years or any alternate evidence of payment of the annual~~
5 ~~operating fees supplied by the Department.~~

6
7 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
8 *Eff. July 1, ~~1992~~, 1992;*
9 *Readopted Eff. [date].*

10 11 SECTION .0500 - CHANGES IN STATUS

12 13 15A NCAC 020 .0501 DRAWING ON FINANCIAL ASSURANCE MECHANISMS

14 The ~~provisions for regulations governing~~ "Drawing on Financial Assurance Mechanisms" ~~contained set forth~~ in 40
15 ~~CFR 280.108 280.112~~ are hereby incorporated by ~~reference~~ reference, ~~including any subsequent amendments and~~
16 ~~editions. Locations where this material is available are specified in Rule .0102 of this Subchapter.~~

17
18 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
19 *Eff. July 1, ~~1992~~, 1992;*
20 *Readopted Eff. [date].*

21 22 15A NCAC 020 .0502 RELEASE FROM THE REQUIREMENTS

23 The ~~provisions for regulations governing~~ "Release From the Requirements" ~~contained set forth~~ in 40 CFR ~~280.109~~
24 ~~280.113~~ are hereby incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions.~~
25 ~~Locations where this material is available are specified in Rule .0102 of this Subchapter.~~

26
27 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
28 *Eff. July 1, ~~1992~~, 1992;*
29 *Readopted Eff. [date].*

30 31 15A NCAC 020 .0503 INCAPACITY OF OWNER OR OPERATOR OR PROVIDER OF ASSURANCE

32 (a) The ~~provisions for regulations governing~~ "Bankruptcy or Other Incapacity of Owner or Operator or Provider of
33 Financial Assurance" ~~contained set forth~~ in 40 CFR ~~280.110 280.114~~, except for Subsection 280.110(d), are hereby
34 incorporated by ~~reference~~ reference, ~~including any subsequent amendments and editions. Locations where this~~
35 ~~material is available are specified in Rule .0102 of this Subchapter.~~

36 (b) Within 30 days after receipt of notification that the Commercial Leaking Petroleum Underground Storage Tank
37 Cleanup Fund has become incapable of paying for assured corrective action or third-party compensation costs, the

1 owner or operator ~~must~~ shall obtain financial assurance for the full amounts specified in Rule .0204, Paragraphs (a)
2 and (c), of this Subchapter.

3 ~~(e) Within 30 days after receipt of notification that the Noncommercial Leaking Petroleum Underground Storage~~
4 ~~Tank Cleanup Fund has become incapable of paying for additional cleanup actions to be undertaken by the~~
5 ~~Department, any owner or operator or guarantor who self insures or guarantees based on Rule .0302, Paragraph (b),~~
6 ~~of this Subchapter must shall obtain financial assurance for at least twice the amount specified in Rule .0204,~~
7 ~~Paragraph (d), of this Subchapter assured in accordance with Rule .0302, Paragraph (b), of this Subchapter.~~

8
9 *History Note: Authority G.S. 143-215.94H; 143-215.94T; 150B-21.6;*

10 *Eff. July 1, ~~1992~~, 1992;*

11 *Readopted Eff. [date].*

13 **15A NCAC 02O .0504 REPLENISHMENT**

14 (a) The ~~provisions for~~ regulations governing "Replenishment of Guarantees, Letters of Credit, or Surety Bonds"
15 ~~contained set forth~~ in 40 CFR ~~280.111~~ 280.115 are hereby incorporated by ~~reference~~ reference, ~~including any~~
16 ~~subsequent amendments and editions. Locations where this material is available are specified in Rule .0102 of this~~
17 ~~Subchapter.~~

18 (b) If at any time after a standby trust is funded upon the instruction of the Department with funds drawn from a
19 guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced to less than the amount for
20 which the owner or operator is responsible per occurrence for third party claims, the owner or operator shall within
21 60 days from which the funds were drawn:

- 22 (1) Replenish the value of financial assurance to equal the full amount of coverage required, or
- 23 (2) Acquire another financial assurance mechanism for the full amount of coverage provided by the
- 24 Standby Trust.

25
26 *History Note: Authority G.S. 143-215.94H; 143-215.94T; 150B-21.6;*

27 *Eff. July 1, ~~1992~~, 1992;*

28 *Readopted Eff. [date].*