HEARING OFFICER'S REPORT OF PROCEEDINGS OF PUBLIC HEARING AND COMMENT PERIOD

Rule Revisions for 15A NCAC 02N
"Underground Storage Tanks"

Environmental Management Commission

November 18, 2021

Basic Information

Commission:	Environmental Management Commission (EMC) (Groundwater and Waste Management Committee)
Agency	Department of Environmental Quality, Division of Waste Management, Underground Storage Tank Section
Title	Underground Storage Tanks
Citations	15A NCAC 02N .0406, .0901, .0905, and .0906
Description of the Proposed Rules	The changes to 15A NCAC 02N .0406, .0901, .0905, and .0906 incorporate changes required by Session Law 2018-114 Sections 19.9(a)-(e) and 19.1(a)-(e), and Session Law 2020-74 Section 17.(a)-(e).
Agency Contact	Andria Archer Hydrogeologist andria.archer@ncdenr.gov (919) 707-8157
Authority	G.S. 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 of the North Carolina Administrative Code.
Statement of Necessity	15A NCAC 02N .0406, .0901, .0905, and .0906 are proposed for amendment to incorporate changes required by Session Law 2018-114 Sections 19.9(a)-(e) and 19.1(a)-(e), and Session Law 2020-74 Section 17.(a)-(e).
Hearing Officer	Shawn McKee, UST Corrective Action Branch
Comment Period	June 15, 2021 to August 27, 2021
Public Hearing	August 3, 2021
Comment Summary	No comments were received during the public hearing or the comment period.
Appendices	A - Notice of Text B - Hearing Transcript and Attendance Sheet C - Hearing Officer Appointment Letter

Rule Summary and Background

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 Subchapter 02N of the North Carolina Administrative Code. These rules are proposed for amendment in order to incorporate changes required by Session Law 2018-114 Sections 19.(a)-(e) and 19.1(a)-(e), and Session Law 2020-74 Section 17.(a)-(e). The Session Law changes were implemented when they became law.

Session Law 2018-114, Section 19.(a) through (e) changes 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. Rule 15A NCAC 02N .0901(o) was amended to incorporate this change.

Session Law 2018-114, Section 19.1(a) through (e) requires the Department to accept all test methods and testing equipment approved by the Environmental Protection Agency, including the use of a testable drop tube (an overfill device), for required triennial testing of UST equipment. Rules 15A NCAC 02N .0406, .0901(o), .0905(g), and .0906(e) were amended to incorporate these changes.

Session Law 2020-74, Section 17.(a) through (e) allows double-walled spill buckets with mechanical liquid detecting sensors to be installed on tanks that were installed prior to November 1, 2007. Rules 15A NCAC 02N .0901(d) and (k) were amended to incorporate this change .

The North Carolina Office of State Budget and Management approved the Regulatory Impact Analysis for these rules on February 1, 2021, and the analysis indicated no potential impacts to state and local government.

Summary of Public Comment and Hearing

The proposed rules and the Regulatory Impact Analysis were approved by the EMC to proceed to public comment and hearing at the May 13, 2021 meeting. The proposed rules were published in the NC Register, and the proposed rules and Regulatory Impact Analysis were published on the Department's website throughout the public comment period from June 15, 2021 to August 27, 2021. The Notice of Text is included in Appendix A. The Division also sent a link to the published notice and regulatory impact analysis for public comment to interested parties via e-mail on June 25, 2021.

The public hearing took place virtually via a Webex event on August 3, 2021. UST Corrective Action Branch Environmental Program Consultant, Shawn McKee, served as the hearing officer for the public hearing. The hearing transcript and attendance sheet can be found in Appendix B. No comments were received at the public hearing or during the public comment period.

The rule text proposed for amendment is included in Attachment A.

Hearing Officer's Recommendation

The Hearing Officer's Recommendation is that the Environmental Management Commission adopt Rules in 15A NCAC 02N with amendments as presented in Attachment A on the November 18, 2021 EMC meeting agenda.

Appendix A

Notice of Text

TITLE 15A – DEPARTMENT OF ENVIRONMENTAL QUALITY

Notice *is hereby given in accordance with G.S. 150B-21.2 that the Environmental Management Commission intends to amend the rules cited as 15A NCAC 02N .0406, .0901, .0905, and .0906.*

Link to agency website pursuant to G.S. 150B-19.1(c): *https://deq.nc.gov/permits-regulations/rules-regulations/proposed-main*

Proposed Effective Date: *Pending Legislative Review*

Public Hearing:
Date: *August 3, 2021*
Time: *6:00 p.m.*
Location: *In an abundance of caution and to address protective measures to help prevent the spread of COVID-19, this public hearing will be held by webinar. WebEx Events meeting link:*
https://ncdenrits.webex.com/ncdenrits/onstage/g.php?MTID=e9c6e4d44cd6121746ecfced5f43dc3d0
Event number: 161 060 8781 Event password: 02NRU

Reason for Proposed Action: *The rule changes to 15A NCAC 02N are necessary to incorporate two North Carolina Session Laws (NCSL): NCSL 2018-114 Sections 19.(a)-(e) and 19.1.(a)-(e) and NCSL 2020-74 Section 17.(a)-(e).*

Comments may be submitted to: *Andria Archer, NCDEQ/DWM/UST Section 1646 Mail Service Center, Raleigh, NC 27699-1646; phone (919) 707-8157; fax (919) 715-1117; email andria.archer@ncdenr.gov*

Comment period ends: *August 16, 2021*

Rule(s) is automatically subject to legislative review. Cite statutory reference: *SL 2018-114, Sections 19.(d) and 19.1.(d) and SL 2020-74, Section 17.(d)*

Fiscal impact. Does any rule or combination of rules in this notice create an economic impact? Check all that apply.
☐ **State funds affected**
☐ **Local funds affected**
☐ **Substantial economic impact (>= $1,000,000)**
☒ **Approved by OSBM**
☒ **No fiscal note required**

CHAPTER 02 - ENVIRONMENTAL MANAGEMENT

SUBCHAPTER 02N – CRITERIA AND STANDARDS APPLICABLE TO UNDERGROUND STORAGE TANKS

SECTION .0400 - GENERAL OPERATING REQUIREMENTS

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 are hereby incorporated by reference, excluding any subsequent amendments and editions, except 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 <u>US Environmental Protection Agency or the</u> 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.

History Note: *Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
Eff. June 1, 2017;
Amended Eff. January 1, 2021.

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 in Rule .0301(b) of this Subchapter.

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

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

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

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

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

(g) UST systems or UST system components shall be installed, tested, operated, and maintained in accordance with the manufacturer's specifications and the codes of practice, and industry standards described in Rule .0907 of this Section.

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

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

(1) detect the failure of the inner wall and outer wall for UST system components with double wall construction;
(2) contain regulated substances released from a UST system until they are detected and removed;
(3) prevent a release of regulated substances to the environment outside of the containment system;
(4) direct releases to a monitoring point or points;
(5) provide a release detection monitoring device or monitoring method for the interstitial space;
(6) on an uninterrupted basis, monitor the inner and outer walls of double-walled tanks for breaches of integrity using pressure, vacuum or hydrostatic monitoring methods or monitor the interstitial space of double-walled tanks for releases using an electronic liquid detecting sensor method along with periodic testing as specified in Rule .0903(f) of this Section;
(7) on an uninterrupted basis, monitor the inner and outer walls of double-walled non-tank components for breaches of integrity using pressure, vacuum, or hydrostatic methods, or monitor a non-tank component for releases by using an electronic liquid detecting sensor placed in a containment sump and in the interstitial space of a double-walled spill bucket along with periodic integrity testing as specified in Rules .0904(f), .0905(g) and .0906(e) of this Section; and
(8) provide a printed record of release detection monitoring results and an alarm history for each month.

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

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

(k) Spill buckets replaced on tanks installed prior to November 1, 2007 may use mechanical liquid detecting sensors for interstitial leak detection monitoring instead of electronic liquid detecting sensors. If a mechanical liquid detecting sensor is used, then Subparagraphs (i)(7) and (8) of this Rule do not apply. However, the spill bucket shall comply with all spill bucket requirements of Rule .0906 of this Section. In addition, the following specific requirements shall be met:

(1) mechanical liquid detecting sensors shall be located at the lowest point in the interstitial space;
(2) mechanical liquid detecting sensors shall detect the presence of any liquid in the interstitial space. The presence of liquid shall register on a gauge that can be viewed from within the spill bucket;
(3) spill buckets shall be monitored every 30 days. The interstitial leak detection monitoring results shall be documented for each month;
(4) any liquid detected in the interstitial space shall be removed within 48 hours of discovery; and
(5) spill buckets shall be integrity tested every three years in accordance with Rule .0906(e) of this Section.

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

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

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

~~(n)~~(o) UST systems and UST system components shall also meet all of the requirements specified in 40 CFR 280.20(c), (d), and (e). In addition, overfill prevention equipment shall be ~~checked annually~~ inspected at least once every three years for operability, proper operating condition and proper calibration in accordance 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 US Environmental Protection Agency or the Division to be no less protective of human health and the environment than the requirements listed in Subparagraph (1) or (2) of this Paragraph. The inspection shall ensure that overfill prevention equipment is set to activate at the correct level specified in 40 CFR 280.20(c)(1)(ii) and will activate when regulated substance reaches that level.
(4) The results of the last ~~annual~~ triennial check shall be recorded, maintained at the UST site or the tank owner or operator's place of business, and made available for inspection.

History Note: *Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
Eff. November 1, 2007;
Amended Eff. February 1, 2010;
Readopted Eff. January 1, 2021.

15A NCAC 02N .0905 CONTAINMENT SUMPS

(a) Containment sumps shall be constructed of non-corroding materials.
(b) Containment sumps shall be designed and manufactured expressly for the purpose of containing and detecting a release.
(c) Containment sumps shall be designed, constructed, installed, and maintained to prevent water infiltration.
(d) Electronic sensor probes used for release detection monitoring shall be located no more than two inches above the lowest point of the containment sump.
(e) At installation, containment sumps shall be tested for tightness after construction, but before backfilling. Tightness testing shall be conducted in accordance with the manufacturer's written guidelines and PEI/RP100, "Recommended Practice for Installation of Underground Liquid Storage Systems." Other tightness test methods may be used if they are approved by the Division. In approving a containment sump tightness testing method the Division shall consider the following factors:

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

(f) If a containment sump fails an installation tightness test, the sump shall be replaced or repaired by the manufacturer or the manufacturer's authorized representative in accordance with the manufacturer's specifications. Following replacement or repair, the containment sump shall be re-tested for tightness in accordance with Paragraph (e) of this Rule.
(g) Containment sumps that are not monitored on an uninterrupted basis for releases using vacuum, pressure or hydrostatic interstitial monitoring methods shall be tested for tightness every three years following installation in accordance 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 US Environmental Protection Agency or the Division to be no less protective of human health and the environment than the requirements listed in Subparagraph (1) and (2) of this Paragraph.

If a containment sump fails a periodic tightness test, the sump shall be replaced in accordance with Paragraphs (a), (b) and (c) of this Rule or repaired by the manufacturer or the manufacturer's authorized representative in accordance with the manufacturer's specifications or a code of practice developed by a nationally recognized association or independent testing laboratory. Following replacement or repair, the containment sump shall be re-tested for tightness in accordance with Paragraph (e) of this Rule. The last periodic tightness test record shall be maintained at the UST site or the tank owner or operator's place of business and shall be available for inspection.
(h) All containment sumps shall be visually inspected at least annually in accordance with Rule .0407 of this Subchapter. Any water or regulated substance present in a sump at the time of inspection shall be removed from the sump within 48 hours of discovery. The visual inspection results shall be documented and shall be maintained for at least one year at the UST site or the tank owner's or operator's place of business and shall be available for inspection.

History Note: *Authority G.S. 143-215.3(a)(15); 143B-282(2)(h);*
Eff. November 1, 2007;
Readopted Eff. January 1, 2021.

15A NCAC 02N .0906 SPILL BUCKETS

(a) Spill buckets shall be pre-fabricated with double-walled construction.
(b) Spill buckets shall be protected from corrosion by being constructed of non-corroding materials.
(c) Spill buckets shall 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 manufacturer's written guidelines 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 shall 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 shall be re-tested for tightness in accordance

with the manufacturers' written guidelines or a code of practice developed by a nationally recognized association or independent testing laboratory.

(e) Spill buckets that are not monitored on an uninterrupted basis for releases using vacuum, pressure or hydrostatic methods, shall be tested for tightness at installation and every three years following installation. The primary containment and interstitial space of the spill bucket shall be tested in accordance 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 US Environmental Protection Agency or the Division to be no less protective of human health and the environment than the requirements listed in Subparagraph (1) and (2) of this Paragraph.

If the spill bucket fails a tightness test, it shall be replaced and tested in accordance with Paragraphs (a) through (d) of this Rule or repaired by the manufacturer or the manufacturer's authorized representative in accordance with the manufacturer's specifications. Following any repair, the spill bucket shall be re-tested for tightness in accordance with the manufacturers' written guidelines or a code of practice developed by a nationally recognized association or independent testing laboratory. The last periodic tightness test record shall be maintained at the UST site or the tank owner or operator's place of business and shall be available for inspection.

History Note: *Authority G.S. 143-215.3(a)(15); 143B-282(2)(h);*
Eff. November 1, 2007;
Readopted Eff. January 1, 2021.

Appendix B

Hearing Transcript and Attendance Sheet

[Shawn Mckee, Hearing Officer]: Good evening. The time is now 6:15 pm on August 3, 2021 and I am calling this hearing to order.

My name is Shawn Mckee and I am a staff member with the Division of Waste Management, Underground Storage Tank Section.

I will be the presiding officer in this evening's public hearing.

In addition to myself, we have several staff in attendance from the Division of Waste Management, Underground Storage Tank Section.

This public hearing is being held by the Environmental Management Commission to solicit public comments on proposed rule amendments in 15A NCAC 02N, *Underground Storage Tanks* and the Regulatory Impact Analysis.

The Environmental Management Commission is granted authority in the North Carolina General Statutes to adopt certain rules as long as the procedures specified in General Statute 150B are followed.

Seeing that there are no members of the public who have joined this virtual public hearing to provide comments, this meeting is adjourned.

Division of Waste Management
UST Section
Public Hearing August 3, 2021, 6pm

Proposed Rule Amendments in 15A NCAC 2N – Underground Storage Tanks

Attendance List

Name	Representing	Do you wish to speak? (Yes/No)
Shawn McKee	DEQ, DWM, UST	N/A
Ruth Strauss	DEQ, DWM, UST	N/A
Ethan Brown	DEQ, DWM, UST	N/A
Andria Archer	DEQ, DWM, UST	N/A

Appendix C

Hearing Officer Appointment Letter

August 3, 2021

To: Ms. Shawn McKee

From: Dr. A. Stan Meiburg

Subject: Hearing Officer Appointment

A Public hearing has been scheduled for August 3, 2021 at 6:00 PM. In an abundance of caution and to address protective measures to help prevent the spread of COVID-19, this public hearing will be held by webinar. WebEx Events meeting link: https://ncdenrits.webex.com/ncdenrits/onstage/g.php?MTID=e3d21e8185f6c6083050739085dbe4027, Event number: 161 060 8781, Event password: 02NRU.

The purpose of this hearing is to receive comments on the amendment of waste management rules in 15A NCAC 02N. The rule changes are necessary to incorporate changes required by Session Law 2018-114 Sections 19.(a)–(e) and 19.1(a)-(e) and Session Law 2020-74 Section 17.1(a)-(e).

I am hereby appointing you to serve as hearing officer for these hearings. Please receive all relevant public comment and report your findings and recommendations to the Environmental Management Commission. Ms. Andria Archer will provide staff support for you.

If you have any questions, please feel free to contact Andria Archer at (919) 707-8157, or me.

cc: Lois Thomas
Andria Archer
Ruth Strauss
Hearing Record File