

Approval - 15A NCAC 02N and 15A NCAC 02O .0309-0314, Underground Storage Tanks

Hollis, Carrie

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To: Merritt, Andria <andria.merritt@ncdenr.gov>;

Cc: Strauss, Ruth <ruth.strauss@ncdenr.gov>; Everett, Jennifer <jennifer.everett@ncdenr.gov>; Masich, Molly <molly.masich@oah.nc.gov>; Vojtko, Dana <dana.vojtko@oah.nc.gov>; Grozav, Anca <Anca.Grozav@osbm.nc.gov>; McLenaghan, Ed <ed.mclenaghan@osbm.nc.gov>; Creech, Shannon A <shannon.creech@osbm.nc.gov>;

📎 1 attachments (666 KB)

DEQ_2016-10-06.pdf;

OSBM has reviewed the DEQ-Division of Waste Management's proposed rule change regarding underground storage tank standards and requirements (15A NCAC 02N and 15A NCAC 02O .0309-0314) in accordance with G.S. 150B-21.4 and with E.O. 70 from 10/21/2010 as amended by E.O. 48 from 4/9/2014. The fiscal note is approved for publication. Please ensure that the state, local government, and substantial economic impacts are included in the Notice of Text and that the NC League of Municipalities and Association of County Commissioners are notified.

The .pdf file of rule impact analysis (attached) will be posted on our website at the following URL (please allow for some time):

https://ncosbm.s3.amazonaws.com/s3fs-public/documents/files/DEQ_2016-10-06.pdf

Please post this link on your agency's website to ensure compliance with G.S. 150B-19.1(c).

Please let me know if you have any questions.

Carrie

Carrie Hollis

Economic Analyst

Demographic and Economic Analysis Section

NC Office of State Budget and Management

919 807 4757 office

carrie.hollis@osbm.nc.gov

116 West Jones Street

20320 Mail Service Center

Raleigh, NC 27699-0320



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**Economic Impact Analysis for Proposed Changes to Underground Storage Tank (UST) Rules
October 2016**

Rule Citation & Title:

- 15A NCAC 02N .0101** – General
- 15A NCAC 02N .0102** – Copies of referenced federal regulations
- 15A NCAC 02N .0103** – Adoption by reference updates
- 15A NCAC 02N .0104** – Identification of tanks
- 15A NCAC 02N .0201** – Applicability
- 15A NCAC 02N .0202** – Interim prohibition for deferred UST systems
- 15A NCAC 02N .0203** – Definitions
- 15A NCAC 02N .0301** – Performance standards for UST system installations or replacements completed after December 22, 1988 and before November 1, 2007
- 15A NCAC 02N .0302** – Upgrading of existing UST systems after December 22, 1988 and before November 1, 2007
- 15A NCAC 02N .0303** – Notification requirements
- 15A NCAC 02N .0304** – Implementation schedule for performance standards for new UST systems and upgrading requirements for existing UST systems located in areas defined in Rule .0301(d)
- 15A NCAC 02N .0401** – Spill and overfill control
- 15A NCAC 02N .0402** – Operation and maintenance of corrosion protection
- 15A NCAC 02N .0403** – Compatibility
- 15A NCAC 02N .0404** – Repairs allowed
- 15A NCAC 02N .0405** – Reporting and recordkeeping
- 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
- 15A NCAC 02N .0407** – Periodic operation and maintenance walkthrough inspections
- 15A NCAC 02N .0501** – General requirements for all UST systems
- 15A NCAC 02N .0502** – Requirements for petroleum UST systems
- 15A NCAC 02N .0503** – Requirements for hazardous substance UST systems
- 15A NCAC 02N .0504** – Methods of release detection for tanks
- 15A NCAC 02N .0505** – Methods of release detection for piping
- 15A NCAC 02N .0506** – Release detection recordkeeping
- 15A NCAC 02N .0601** – Reporting of suspected releases
- 15A NCAC 02N .0602** – Investigation due to off-site impacts
- 15A NCAC 02N .0603** – Release investigation and confirmation steps
- 15A NCAC 02N .0604** – Reporting and cleanup of spills and overfills
- 15A NCAC 02N .0701** – General
- 15A NCAC 02N .0702** – Initial response
- 15A NCAC 02N .0703** – Initial abatement measures and site check
- 15A NCAC 02N .0704** – Initial site characterization
- 15A NCAC 02N .0705** – Free product removal
- 15A NCAC 02N .0706** – Investigations for soil and ground water cleanup

15A NCAC 02N .0707 – Corrective action plan
15A NCAC 02N .0708 – Public participation
15A NCAC 02N .0801 – Temporary closure
15A NCAC 02N .0802 – Permanent closure and changes-in-service
15A NCAC 02N .0803 – Assessing the site at closure or change-in-service
15A NCAC 02N .0804 – Applicability to previously closed UST systems
15A NCAC 02N .1001 – Definitions
15A NCAC 02N .1002 – General requirements
15A NCAC 02N .1003 – Additions, exceptions, and alternatives for UST systems with field-constructed tanks and airport hydrant systems
15A NCAC 02O .0309 – Local government bond rating test
15A NCAC 02O .0310 – Local government financial test
15A NCAC 02O .0311 – Local government guarantee
15A NCAC 02O .0312 – Local government fund
15A NCAC 02O .0313 – Substitution of financial assurance mechanisms
15A NCAC 02O .0314 – Cancellation or nonrenewable by a provider of assurance

Name of Commission: Environmental Management Commission

Agency Contact: Ruth Strauss
 North Carolina Department of Environmental Quality,
 Division of Waste Management
 1646 Mail Service Center
 Raleigh, NC 27699-1637
 Phone: 919 707-8299
 Email: ruth.strauss@ncdenr.gov

Impact Summary: State government: Yes
 Local government: Yes
 Private industry: Yes
 Substantial impact: Yes
 Federal government: Yes

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.

Necessity: The proposed rule changes are necessary to incorporate into the state's rules, changes that were made to the federal UST regulations (40 CFR Part 280). The State is required to incorporate the federal changes to retain its State Program Approval.

I. Introduction

The purpose of this document is to provide a regulatory impact analysis of proposed amendments to 15A NCAC 02N and 15A NCAC 02O. The proposed effective date for the rule changes is June 1, 2017.

The rules in 15A NCAC 02N and 15A NCAC 02O are largely based on the requirements of 40 CFR Part 280.

A. Federal Certification

Revisions were made to 40 CFR 280 by the Environmental Protection Agency (EPA) and published in the Federal Register on July 15, 2015. The revised federal regulation represents the first major revision to the federal underground storage tank (UST) regulations since 1988. The revisions change existing requirements for USTs and add new requirements for secondary containment and operator training that are similar to key portions of the Energy Policy Act of 2005.

EPA revised the 1988 40 CFR 280 regulation to: ensure owners and operators properly operate and maintain their UST systems; address UST systems deferred in the 1988 UST regulation; include updates to current technology and codes of practice; and make technical and editorial corrections. These revisions created additional requirements for owners and operators of UST systems.

EPA requires that a state receiving Leaking UST Trust Funds must implement the new regulations by October 13, 2018, or risk losing the federal monies that it receives for the UST program. North Carolina receives UST Trust Fund monies totaling approximately \$2.9 million annually.

By adopting the changes to 40 CFR part 280, the State will maintain its State Program Approval (SPA) with EPA. The proposed rule changes to 15A NCAC 02N largely incorporate 40 CFR part 280 without modifications; however, some exceptions and additions are proposed. The majority of these exceptions and additions are included in order to maintain continuity with existing North Carolina rules that deviate from the federal regulations as allowed by North Carolina's SPA status.

Revisions to 40 CFR 280 Subpart H – Financial Responsibility by the EPA were published in February 1993. The revisions amended 40 CFR 280.104-280.109 to add four additional financial mechanisms and then renumber two existing mechanisms. These additional mechanisms have been available to North Carolina UST owners and operators even though they are not listed in 15A NCAC 02O because the regulations of Subpart H were incorporated by reference including any subsequent amendments and editions. The proposed changes to 15A NCAC 02O will codify those revisions.

II. Proposed Changes

A. 15A NCAC 02O

The proposed amendments to 15A NCAC 02O will not have any economic impact. Since these amendments simply add additional options for meeting existing financial responsibility requirements, the economic impact of these changes would be zero.

B. 15A NCAC 02N

This analysis relies on data from EPA's April 2015 financial impact document entitled *Assessment of the Potential Costs, Benefits, and Other Impacts of the Final Revisions to EPA's Underground Storage Tank Regulations* (hereafter *Assessment of the Potential Costs*).¹ The explanation of uncertainties and assumptions associated with that data, as well as sensitivity analyses, can be found in the *Assessment of the Potential Costs*. In the *Assessment of the Potential Costs*, the EPA identified all quantitative and qualitative impacts for the UST regulation (within the constraints of data availability). However, whenever available, this analysis uses North Carolina data concerning the numbers of UST facilities and UST systems affected.

The total number of UST facilities in North Carolina is 7,628; the total number of USTs is 24,729; and the estimated number of USTs per UST facility is 3.2.

Table 1 is based on Exhibit 2-4 of EPA's *Assessment of the Potential Costs* and lists each regulatory change, the universe affected, and the proportion of the total universe affected by each change. By applying the proportions to the North Carolina UST system population, the number of USTs potentially affected annually in North Carolina is calculated. The table also includes the assumptions and sources used to determine the proportion affected. Some numbers in the table were adjusted to show the number of USTs affected instead of the number of UST facilities using the factor of 3.2 tanks per facility for consistency and transparency purposes.

The table also indicates which numbers of potentially affected systems do not include USTs that are already meeting certain requirements due to implementation of those requirements on November 1, 2007, in North Carolina as part of meeting the federal Energy Policy Act of 2005.

¹ Industrial Economics, Incorporated. (April 2015). *Assessment of the Potential Costs, Benefits, and Other Impacts of the Final Revisions to EPA's Underground Storage Tank Regulations*. Retrieved from EPA Website: <https://www.epa.gov/sites/production/files/2015-07/documents/regs2015-ria.pdf>

Table 1. Number of USTs potentially affected by new requirements

Regulatory Change	Universe	Proportion of Total Universe Affected Annually	Number of Potentially Affected USTs in NC (Annual)	Assumptions	Source
Release Prevention					
Walkthrough inspections	Facilities with Conventional UST systems and Emergency Generator Tanks (EGTs)	100.0%	24,729 ^{a, b}	All facilities require periodic walkthrough inspections.	UST Program records.
Overfill prevention equipment inspections	Conventional UST systems and EGTs	100.0%	23,037 ^c	Percentage of UST systems with overfill prevention equipment.	UST Program records and EPA assumption that all UST systems have overfill.
Spill prevention equipment tests	Conventional UST systems and EGTs	90.0%	20,733 ^d	One-to-one spill prevention equipment to tank ratio; 10 percent have self-monitoring mechanism and do not need monitoring.	UST Program records and EPA estimate based on discussions with service contractors and inspectors.
Containment sump testing	Conventional UST systems and EGTs	18.3%	4,215 ^d	Pipes that use interstitial monitoring and do not use continuous sensors, pressure, vacuum, or liquid-filled leak detection monitoring mechanisms.	UST Program records and EPA analysis.
Spill prevention equipment inspection after repair	Conventional UST systems and EGTs	2.5%	575 ^d	Spill prevention equipment requires fix once every four years; repairs are used as the fix 10 percent of the time.	UST Program records and EPA analysis.
Overfill prevention equipment test after repair	Conventional UST systems and EGTs	2.0%	460 ^d	Overfill prevention equipment requires fix once every five years; repairs are used as the fix 10 percent of the time.	UST Program records and EPA analysis.
Secondary containment test after repair	Conventional UST systems and EGTs	3.3%	760 ^d	Tanks and pipes that use interstitial monitoring and do not use continuous sensors, pressure, vacuum, or liquid-filled leak detection monitoring mechanisms. Includes five percent of tanks and 90 percent of piping that use interstitial monitoring. Assumes 20 percent of pipes and five percent of tanks require repair every year.	UST Program records and EPA analysis.
Eliminate flow restrictors in vent lines for all new tanks and when overfill prevention equipment is replaced	Conventional UST systems and EGTs	13.5%	3,338 ^a	13 percent of new UST systems would have installed flow restrictors in vent lines, and 13 percent of existing UST systems with replaced overfill prevention equipment would have	UST Program records and EPA analysis.

				installed flow restrictors in vent lines. Assumes five percent turnover of UST systems, a 19 percent test fail rate for flow restrictor, and that 90 percent of fixes require replacement of the flow restrictor.	
Release Detection					
Operability test – ATG	Conventional UST systems and EGTs	33.7%	8,333 ^d	UST systems that use automatic tank gauges.	UST Program records and EPA analysis.
Operability test – interstitial monitoring	Conventional UST systems and EGTs	18.8%	4,649 ^d	UST systems that use interstitial monitoring (excluding five percent that conduct manual testing of the interstice).	UST Program records and EPA analysis.
Operability test – line leak detection	Conventional UST systems and EGTs	27.5%	6,800	Pressurized piping systems that use electronic line leak detectors.	UST Program records and EPA analysis.
Operability test–groundwater and vapor monitoring	Conventional UST systems and EGTs	4.5%	1,112 ^a	UST systems that use vapor monitoring and/or groundwater monitoring as their sole release detection method(s).	UST Program records and EPA analysis.
Add SIR/CITLD (continuous in-tank leak detection) to regulation with performance criteria	Conventional UST systems and EGTs	0.5%	123 ^a	13 percent of UST systems use SIR; 15 percent of these use qualitative methods. Of these, 25 percent are assumed to incur costs to comply.	UST Program records and EPA analysis.
Response to interstitial monitoring alarms	Conventional UST systems and EGTs	2.4%	593 ^d	Weighted average annual percentage of UST systems and piping that experience an interstitial monitoring alarm. Assumes 20 percent of tanks and 18 percent of pipes use interstitial monitoring, and that three percent of tanks and 10 percent of pipes experience an alarm in a given year.	UST Program records and EPA analysis.
Remove release detection deferral for emergency generator tanks	EGTs	3.0%	244 ^e	UST systems assumed to be emergency generator tanks.	UST Program records and EPA review of over 15 state databases and discussions with several state UST program representatives.
Other					
Remove deferral for airport hydrant fuel distribution systems	AHFDSs	100.0%	6 ^{b, e}	All airport hydrant fuel distribution systems.	UST Program records and EPA analysis.
Remove deferral for UST systems with field-	FCTs	100.0%	0	All UST systems with field-constructed tanks, including 334 DoD	UST Program records.

constructed tanks				systems and 12 DoE systems.	
Require notification of ownership change	Facilities with Conventional UST systems and EGTs	10.1%	2,497 ^{a, b}	Annual number of facilities that change ownership.	UST Program records and EPA analysis.
Closure of lined tanks that cannot be repaired according to a code of practice	Conventional UST systems and EGTs	<0.1%	24 ^a	Annual number of lined UST systems that cannot be repaired	UST Program records and EPA analysis.
Requirements for demonstrating compatibility with fuels > E10 ^f and > B20 ^f	Conventional UST systems and EGTs	0.04%	9 ^a	0.4 percent of conventional UST systems and EGTs use fuels E >10 or B > 20, assume 10 percent can demonstrate compatibility	UST Program records and EPA analysis which includes U.S. Department of Energy's (DoE's) Alternative Fuels Data Center listing stations selling E85 fuel. ^b
EPAAct-related Provisions					
Operator training	UST Facilities in Indian country	100.0%	0	All facilities in Indian country.	Not applicable – applies to facilities in Indian country.
Secondary containment - new and replaced tanks	UST systems in Indian country	36.2%	0	Applies to systems in Indian country.	Not applicable – applies to UST systems in Indian country.
Threshold for pipe replacement rather than repair	UST systems in Indian country	30.2%	0	Applies to systems in Indian country.	Not applicable – applies to UST systems in Indian country.
Under-dispenser containment for all new dispensers	UST systems in Indian country	48.5%	0	Applies to systems in Indian country.	Not applicable – applies to UST systems in Indian country.
^a Requirement affects all regulated USTs in North Carolina (24,729 USTs) ^b Number adjusted from what was reported in the "Assessment of the Potential Costs" to show the number of USTs affected instead of the number of UST facilities ^c Requirement affects USTs installed before November 1, 2007 in North Carolina but at a different frequency; North Carolina requirement is annual for USTs installed after November 1, 2007 (1,692 USTs installed after November 1, 2007) ^d Requirement affects USTs installed before November 1, 2007 in North Carolina (1,692 USTs installed after November 1, 2007) ^e Due to the availability of State program records for these two types of USTs, the actual number of tanks registered in North Carolina was used instead of the federal proportion for increased accuracy. ^f E10 is an ethanol fuel blend of 10 percent ethanol and 90 percent unleaded gasoline. B20 is a biodiesel fuel blend of 6 to 20 percent biodiesel and petroleum diesel. E85 is an ethanol fuel blend of 85 percent denatured ethanol and 15 percent gasoline.					

Table 2 lists how often each of the new requirements must be carried out and the deadlines for meeting each requirement.

Table 2. Frequency and Deadlines for Requirements

	Frequency	Deadline
Release Prevention		
Walkthrough inspections	Every month	First inspection no later than 10-13-18, then monthly thereafter
Overfill prevention equipment inspections	Every 3 years	First inspection no later than 10-13-18, then every three years thereafter
Spill prevention equipment tests	Every 3 years	First test no later than 10-13-18, then every three years thereafter
Containment sump testing	Every 3 years	First test no later than 10-13-18, then every three years thereafter
Spill prevention equipment inspection after repair	Within 30 days of repair	Beginning on 10-13-18
Overfill prevention equipment test after repair	Within 30 days of repair	Beginning on 10-13-18
Secondary containment test after repair	Within 30 days of repair	Beginning on 10-13-18
Eliminate flow restrictors in vent lines for all new tanks and when overfill prevention equipment is replaced	At installation or when replaced	Beginning on effective date of NC's rules
Release Detection		
Operability tests – ATG	Every year	Beginning on 10-13-18
Operability tests – interstitial monitoring	Every year	Beginning on 10-13-18
Operability tests – line leak detection	Every year	Beginning on 10-13-18
Operability tests – vapor monitoring	Every year	Beginning on 10-13-18
Operability tests – groundwater monitoring	Every year	Beginning on 10-13-18
Site assessment – vapor monitoring	One time	By 10-13-18
Site assessment – groundwater monitoring	One time	By 10-13-18
Add SIR/CITLD to regulation with performance criteria	One time	Beginning on effective date of NC's rules
Response to interstitial monitoring alarms	Within 24 hours of alarm	Beginning on effective date of NC's rules
Remove release detection deferral for emergency generator tanks	One time	By 10-13-18
Other		
Remove deferral for airport hydrant fuel distribution systems	One time then every year	By 10-13-18
Remove deferral for UST systems with field-constructed tanks	One time	By 10-13-18
Require notification of ownership change	Within 30 days of ownership change	Beginning on effective date of NC's rules
Closure of lined tanks that cannot be repaired according to a code of practice	One time	Beginning on effective date of NC's rules
Requirements for demonstrating compatibility with fuels > E10 and > B20	One time	Beginning on effective date of NC's rules
Cost to owners/operators to read regulation	One time	Beginning on effective date of NC's rules
EPAct-related Provisions		
Operator training	N/A	N/A
Secondary containment - new and replaced tanks	N/A	N/A
Threshold for pipe replacement rather than repair	N/A	N/A
Under-dispenser containment for all new dispensers	N/A	N/A

Costs

Table 3 is based on Exhibit 3-1 of EPA's *Assessment of the Potential Costs* and lists the unit costs associated with each regulatory change.

Exhibit 3-1 of EPA's *Assessment of the Potential Costs* listed a unit cost for each of the new requirements. For the purposes of applying these numbers to the North Carolina tank population,

the unit costs were annualized², inflated to 2016 dollars using the Consumer Price Index, and adjusted to a per-tank basis using a factor of 3.2 USTs per UST facility in North Carolina rather than the nationwide 2.7 UST per facility ratio.

The EPA assembled 20-year schedules of costs and benefits that reflect the growth of each affected universe. For each year, the analysis calculates the present value of cash flows based on the system cost or avoided cost due to compliance. The present values of the cash flows are summed to obtain the total benefit over 20 years. This sum of cash flows is annualized into constant cash flows over a 20-year period, which creates an adjusted unit cost of compliance that distributes the effect of the phase-in of costs and benefits uniformly over the affected universe. The analysis categorizes compliance costs into one-time or operation and maintenance costs and amortizes one-time compliance costs over the 20-year regulatory time horizon. It discounts annual compliance costs associated with several of the regulatory changes to delayed compliance horizons specified in the regulation. For regulatory changes that take effect over time as equipment ages, the analysis assumes a constant rate of equipment replacement, and calculates a constant annual payment for the NPV of 20 years of replacement. Requirements that apply at the facility level are converted to a system basis using a conversion factor of 3.2 USTs per UST facility.

Labor costs are included in the compliance costs. Compliance costs include direct compliance costs and state oversight costs. Compliance costs include the labor and capital costs associated with new equipment and installation, inspection, testing, and recordkeeping. Some component costs are specific to individual UST system configurations. Operation and maintenance activities include the labor and materials costs associated with maintenance of equipment, routine testing, and inspection (whether performed by the owner, operator, or a contractor).

The model also includes other compliance costs, such as the repair and replacement costs associated with more frequent detection of equipment failure and repair of equipment. The change in the timing of the regulatory inspections, as well as the increased probability of finding problems due to the proposed walkthrough-inspection requirement, will change the timing of repairs and replacements that owners and operators must make. In some cases, this may create a cost savings by correcting problems earlier when repairs are less costly and, in others, may increase time value of money costs due to changes in the timing of repairs and replacements. The repair and replacement costs that the *Assessment of the Potential Costs* estimated are slightly different than actual North Carolina costs due to the different regulatory baseline in the state. However, due to the uncertainty of how more frequent repairs and replacements will affect total long-term costs, this analysis used the national estimates.

² In Exhibit 3-1 of the *Assessment of Potential Costs*, the one-time unit costs and the operation and maintenance unit costs are not shown in annual terms but rather in one-time or per-incident terms. For this analysis, all one-time, operation and maintenance, and repair/replacement costs are annualized and summed to a single annual cost per tank.

Table 3. Cost of each requirement per UST

	Total Annualized, Discounted Costs per UST in 2016\$
Release Prevention	
Walkthrough inspection	68.00
Overfill prevention equipment inspection	150.56
Spill prevention equipment test	87.84
Containment sump testing	325.66
Spill prevention equipment inspection after repair	381.61
Overfill prevention equipment test after repair	420.78
Secondary containment test after repair	197.60
Eliminate flow restrictor in vent line for new tank and when overfill prevention equipment is replaced	41.68
Release Detection	
Operability test – ATG	74.27
Operability test – interstitial monitoring	21.48
Operability test – line leak detection	64.40
Operability test – vapor monitoring	12.52
Operability test – groundwater monitoring	11.91
Site assessment for release detection – vapor monitoring	25.40
Site assessment for release detection – groundwater monitoring	25.42
Add SIR/CITLD to regulation with performance criteria	1.06
Response to interstitial monitoring alarm	0.00
Remove release detection deferral for emergency generator tank	232.60
Other	
Remove deferral for airport hydrant fuel distribution system	42,287.43
Remove deferral for UST systems with field-constructed tank	N/A
Require notification of ownership change	4.68
Closure of lined tank that cannot be repaired according to a code of practice	4,144.71
Requirements for demonstrating compatibility with fuels > E10 and > B20	2.03
Cost to owners/operators to read regulation	26.88
EPAAct-related Provisions	
Operator training	N/A
Secondary containment - new and replaced tanks	N/A
Threshold for pipe replacement rather than repair	N/A
Under-dispenser containment for all new dispensers	N/A

Potential Impact to the Implementing Agency

There will be opportunity costs of staff time to the implementing agency related to compliance inspections.³ UST inspectors will have to inspect additional UST facilities, such as facilities with airport hydrant fuel distribution systems. They will also have to inspect for additional requirements at each UST facility. This means that each routine compliance inspection will take longer, and that inspectors will be assigned more facilities. In order to accomplish this using existing resources, the frequency that a facility is inspected will be increased from about 2.5 years to almost three years.

The average annual wages of NCDEQ UST Inspectors are approximately \$44,354.90. Using that figure in the North Carolina Office of State Human Resources Total Compensation Calculator yields a total annual compensation of \$65,944.91 per inspector. To calculate the annual opportunity costs of staff time associated with these proposed rules, half of that total compensation amount,

³ NCDEQ conducts compliance inspections of USTs and UST facilities on a recurring basis. These inspections are independent of the walkthrough inspections and tests that tank owners are required to complete pursuant to these proposed rules.

\$32,972.45, (because six months is half of a year) is multiplied by 20, the number of NCDEQ inspector positions. Therefore, the new requirements impose an additional staff time burden on the implementing agency that is estimated at \$659,449 over a three-year period, or \$219,816 annually.

Potential Impact to the Public

There will also be unquantified costs associated with less frequent inspection by the UST Section. As previously explained, the frequency that a facility is inspected will be increased from about 2.5 years to almost three years. This could potentially result in more leaks from UST systems as facilities could be in violation of the rules for longer time periods.

Potential Impact to the Regulated Community

The proposed amendments to 15A NCAC 02N will economically impact the regulated community.

For all the proposed requirements, the costs associated with inspection, testing, and record-keeping for a UST system are borne by the UST owner. In most cases, testing and inspections are performed by third parties and the UST owner incurs the cost of their services.

Table 4 lists the number of USTs owned by each sector – federal government, local/county government, state government, and privately-owned – based on UST program records from July 2016.

Table 4. Number of USTs Owned Per Sector

Owner	Before 11-1-07			On or after 11-1-07		
	Emergency Power Generation	Airport hydrant	Motor Fuel	Emergency Power Generation	Airport hydrant	Motor Fuel
Federal government	8	12	89	0	0	8
Local/county government	55	0	566	0	0	26
State government	1	0	321	0	0	8
Private	149	0	21,836	10	0	1,640

Table 5 lists the number of USTs in each sector affected by each regulation.

Table 5. Number of Affected USTs By Sector

Requirement	Federally-owned USTs affected	Local/county-owned USTs affected	State-owned USTs affected	Privately-owned USTs affected
Release Prevention				
Walkthrough inspections	117	647	330	23,635
Overfill prevention equipment inspections	109	621	322	21,985
Spill prevention equipment tests	98	558	289	19,786
Containment sump testing	19	113	58	4,023
Spill prevention equipment inspection after repair	2	15	8	549
Overfill prevention equipment test after repair	2	12	6	472
Secondary containment test after repair	3	20	10	725
Eliminate flow restrictors in vent lines for all new tanks and when overfill prevention equipment is replaced	15	87	44	3,190
Release Detection				
Operability tests – ATG	36	209	108	7,408
Operability tests – interstitial monitoring	20	116	60	4,133
Operability tests – line leak detection	29	170	88	6045
Operability tests – vapor monitoring	5	27	14	989
Operability tests – groundwater monitoring	5	27	14	989
Add SIR/CITLD to regulation with performance criteria	<1	3	1	109
Response to interstitial monitoring alarms	2	14	7	527
Remove release detection deferral for emergency generator tanks ^a	8	55	1	149
Other				
Remove deferral for airport hydrant fuel distribution systems ^a	12	0	0	0
Remove deferral for UST systems with field-constructed tanks	0	0	0	0
Require notification of ownership change	11	65	33	2387
Closure of lined tanks that cannot be repaired according to a code of practice	<1	<1	<1	21
Requirements for demonstrating compatibility with fuels > E10 and > B20	<1	<1	<1	8
Cost to owners/operators to read regulation	117	647	330	23,635
EPAct-related Provisions				
Operator training	0	0	0	0
Secondary containment - new and replaced tanks	0	0	0	0
Threshold for pipe replacement rather than repair	0	0	0	0
Under-dispenser containment for all new dispensers	0	0	0	0
^a Due to the availability of State program records, the actual number of tanks registered in North Carolina was used instead of the federal proportion for increased accuracy				

Table 6 lists the costs of each regulation annually by sector.

Table 6. Costs Per Requirement By Sector

Requirement	Federally-owned USTs affected	Local/county-owned USTs affected	State-owned USTs affected	Privately-owned USTs affected
Release Prevention				
Walkthrough inspection	\$7,956	\$43,996	\$22,440	\$1,607,180
Overfill prevention equipment inspection	\$16,411	\$93,497	\$48,480	\$3,310,061
Spill prevention equipment test	\$8,608	\$49,014	\$25,385	\$1,738,002
Containment sump testing	\$6,187	\$36,799	\$18,888	\$1,310,130
Spill prevention equipment inspection after repair	\$763	\$5,724	\$3,052	\$209,503
Overfill prevention equipment test after repair	\$841	\$5,049	\$2,524	\$198,608
Secondary containment test after repair	\$592	\$3,952	\$1,976	\$143,260
Eliminate flow restrictor in vent line for new tank and when overfill prevention equipment is replaced	\$625	\$3,626	\$1,833	\$132,959
Release Detection				
Operability test – ATG	\$2,673	\$15,522	\$8,021	\$550,192
Operability test – interstitial monitoring	\$429	\$2,491	\$1,288	\$88,776
Operability test – line leak detection	\$1,867	\$10,948	\$5,667	\$389,298
Operability test – vapor monitoring	\$62	\$338	\$175	\$12,382
Operability test – groundwater monitoring	\$59	\$321	\$166	\$11,778
Add SIR/CITLD to regulation with performance criteria	\$1	\$3	\$1	\$115
Response to interstitial monitoring alarm	\$0	\$0	\$0	\$0
Remove release detection deferral for emergency generator tank	\$1,860	\$12,793	\$232	\$34,657
Other				
Remove deferral for airport hydrant fuel distribution system	\$507,449	\$0	\$0	\$0
Remove deferral for UST systems with field-constructed tank	\$0	\$0	\$0	\$0
Require notification of ownership change	\$51	\$304	\$154	\$11,171
Closure of lined tank that cannot be repaired according to a code of practice	\$4,144	\$4,144	\$4,144	\$87,038
Requirements for demonstrating compatibility with fuels > E10 and > B20	\$2	\$2	\$2	\$16
Cost to owners/operators to read regulation	\$3,144	\$17,391	\$8,870	\$635,308
EPAAct-related Provisions				
Operator training	\$0	\$0	\$0	\$0
Secondary containment - new and replaced tanks	\$0	\$0	\$0	\$0
Threshold for pipe replacement rather than repair	\$0	\$0	\$0	\$0
Under-dispenser containment for all new dispensers	\$0	\$0	\$0	\$0
^a One-time cost				

III. Benefits

State Program Approval Benefits

One of the benefits of adopting 40 CFR part 280 is that the State will maintain its State Program Approval (SPA) with EPA. States that meet the requirements of EPA's SPA regulation and receive approval may operate their own UST programs in lieu of the federal program. SPA makes it possible for states to receive Leaking UST Trust Funds and adequate enforcement capabilities. In order to achieve SPA status, states must meet certain performance criteria, including being no less stringent than 40 CFR part 280. However, even though a state program cannot be less stringent than the federal regulations, SPA does allow state programs to deviate slightly from what is explicitly required in 40 CFR part 280 so long as it is equivalent or more stringent.

Therefore, by having SPA status, North Carolina receives approximately \$2.9 million annually in federal monies. In addition, North Carolina UST owners and operators, as well as the State's UST program, enjoy greater flexibility in implementation of the federal UST regulations by not adhering to the federal regulation exactly as written.

The proposed rule changes largely incorporate 40 CFR part 280 without modifications; however, some exceptions and additions are proposed. The majority of these exceptions and additions are included in order to maintain continuity with existing North Carolina rules that deviate from the federal regulations as allowed by North Carolina's SPA status. Adopting 40 CFR part 280 with the proposed modifications will offer greater flexibility [example: requests for extensions] and maintain continuity [examples: forms, operator training, secondary containment, testing requirements] for UST owners and operators, and the UST Program.

If 40 CFR part 280 was adopted without these exceptions and additions, the State's UST owners and operators would be required to adhere to the federal regulation exactly as written.

If the revised 40 CFR part 280 was not adopted in North Carolina, the State would lose SPA status and the funding and enforcement capabilities that it affords. In addition, EPA would then be required to implement 40 CFR part 280 in the State using its staff and resources.

Avoided Remediation Costs

The changes to 40 CFR part 280 are expected to reduce contamination of soil and groundwater in North Carolina through improved equipment maintenance and monitoring. Reducing the need for remediation of soil and groundwater creates cost savings that accrue to owners, operators, and public entities responsible for remediating releases at regulated facilities.

The *Assessment of the Potential Costs* states that total avoided remediation costs are approximately \$300 million on a national level. The calculation of that dollar amount was in part based on the number of confirmed releases nationally per EPA's Office of Underground Storage Tanks' (OUST) 2009 End-of-Year Annual Report. To determine what portion of the \$300 million in cost savings may apply to North Carolina, OUST's Semiannual Report of UST Performance

Measures for Mid Fiscal Year 2016 (October 1, 2015-March 31, 2016) was consulted to determine approximately what percent of confirmed releases on a national level happen in North Carolina. According to the Mid Fiscal Year 2016 report, of 529,390 cumulative confirmed releases, 26,076 happened in North Carolina. Applying that proportion to the \$300 million in total avoided remediation costs yields \$14.7 million in potential avoided remediation costs in the State should the new federal regulations be adopted.

Human Health and Environmental Benefits

In addition to avoiding remediation costs, release prevention and mitigation results in a variety of other beneficial impacts, including: avoided vapor intrusion damages; avoided product loss; human health benefits; avoided acute exposure events and large-scale releases; and ecological benefits (including protection of groundwater quality).

IV. Conclusion

The proposed rule amendments serve to incorporate revisions made by the EPA to 40 CFR Part 280 that affect North Carolina rules 15A NCAC 02N and 15A NCAC 02O. The revisions that affect 15A NCAC 02N will impact UST owners and operators and NCDEQ by adding requirements for UST system compliance with total associated costs. The revisions that affect 15A NCAC 02O give UST owners and operators additional options for satisfying financial responsibility requirements and therefore will not have any economic impact. The revisions are expected to reduce contamination of soil and groundwater and avoid costs associated with remediation and mitigation of releases. For a sensitivity analysis of the critical assumptions used to develop the cost and benefit estimates, see Chapter 7 of the *Assessment of the Potential Costs*.

Table 7 lists the total costs and benefits for each sector.

Table 7. Total Annualized Costs and Benefits Per Sector

	Costs	Benefits
UST Owners		
Federal government	(\$563,724)	
Local/county government	(\$305,914)	
State government	(\$153,298)	
Private	(\$10,470,434)	
State/NCDEQ	(\$219,816)	\$2,900,000
Private Citizens		\$1,394,845 +B*
Present Value of Annualized Costs and Benefits, FY2017	(\$11,713,186)	\$4,294,845 +B*
Net Present Value of Rule Changes, 20 Years**	(\$78,590,010) +B*	

*"B" represents the unquantified human health and environmental benefits associated with improved release prevention and mitigation.

** The net present value was calculated as of July1, 2016 using a 7% discount rate. In alignment with the cost calculation methodology in the national-level *Analysis of Potential Costs*, costs and benefits were discounted over a 20-year period, the assumed useful life of a UST.

1 15A NCAC 02N .0101 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0101 GENERAL**

4 (a) The purpose of this Subchapter is to establish the technical standards and corrective action requirements for owners and
5 operators of underground storage tanks.

6 (b) The ~~Groundwater~~ UST Section of the Division of ~~Environmental~~ Waste Management shall administer the underground
7 storage tank program for the State of North Carolina.

8 ~~(c) Division staff may conduct inspections as necessary to ensure compliance with this Subchapter.~~

9

10 *History Note:* ~~Statutory~~ Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h);

11 *Eff. January 1, ~~1991~~ 1991;*

12 *Amended Eff. XXXX 1, 2017.*

1 15A NCAC 02N .0102 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0102 COPIES OF REFERENCED FEDERAL REGULATIONS**

4 ~~(a) Copies of the applicable Code of Federal Regulations-Regulations, Sections 40 CFR 280.10-280.252 and Appendices~~
 5 ~~Part 280, may be obtained at www.ecfr.gov/cgi-bin/ECFR?page=browse at no cost. sections referred to in this Subchapter are~~
 6 ~~available for public inspection at Department of Environment, Health and Natural Resources regional offices. They are:~~

7 ~~— (1) — Asheville Regional Office, Interchange Building, 59 Woodfin Place, Post Office Box 370, Asheville, North~~
 8 ~~Carolina 28802;~~

9 ~~— (2) — Winston Salem Regional Office, Suite 100, 8025 North Point Boulevard, Winston Salem, North Carolina~~
 10 ~~27106;~~

11 ~~— (3) — Mooresville Regional Office, 919 North Main Street, Mooresville, North Carolina 28115;~~

12 ~~— (4) — Raleigh Regional Office, 3800 Barrett Drive, Post Office Box 27687, Raleigh, North Carolina 27611;~~

13 ~~— (5) — Fayetteville Regional Office, Wachovia Building, Suite 714, Fayetteville, North Carolina 28301;~~

14 ~~— (6) — Washington Regional Office, 1424 Carolina Avenue, Farish Building, Washington, North Carolina 27889;~~

15 ~~— (7) — Wilmington Regional Office, 7225 Wrightsville Avenue, Wilmington, North Carolina 28403.~~

16 ~~(b) Copies of such regulations can be made at these regional offices for ten cents (\$0.10) per page.~~

17

18 *History Note:* ~~Statutory Authority G.S. 12-3-1(c); 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h);

19 ~~Eff. January 1, 1991. 1991;~~

20 ~~Amended Eff. XXXX 1, 2017.~~

1 15A NCAC 02N .0103 is proposed for repeal as follows:

2

3 ~~15A NCAC 02N .0103~~ — **ADOPTION BY REFERENCE UPDATES**

4 ~~The Code of Federal Regulations adopted by reference in this Subchapter shall include any later amendments thereto as~~
5 ~~allowed by G.S. 150B-14(e).~~

6

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

8 *Eff. January 1, 1991.*

9 *Repealed Eff. XXXX 1, 2017.*

1 15A NCAC 02N .0104 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0104 IDENTIFICATION OF TANKS**

4 (a) Owners and operators shall maintain at each ~~facility~~ underground storage tank location a current diagram that ~~clearly~~
5 indicates, for each underground storage tank:

6 (1) location with respect to property boundaries and any permanent on-site structures;

7 (2) total storage capacity, in gallons;

8 (3) the exact type of petroleum product (such as unleaded gasoline, No. 2 fuel oil, diesel) or hazardous
9 substance stored; and

10 (4) the year the tank was installed.

11 (b) The diagram shall be made available for ~~inspection,~~ inspection during normal operating hours, to authorized
12 representatives of the ~~Department~~ Division.

13

14 *History Note:* ~~Statutory~~ Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h);

15 *Eff. January 1, 1991, 1991;*

16 *Amended Eff. XXXX 1, 2017.*

1 15A NCAC 02N .0201 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0201 APPLICABILITY**

4 The ~~provisions for regulations governing "Applicability" contained set forth~~ in 40 CFR 280.10 (~~Subpart A~~) are hereby
5 incorporated by ~~reference~~ reference, ~~including subsequent amendments and editions~~ except that:

6 (1) Underground storage tanks (UST) containing de ~~minimus~~ minimis concentrations of regulated
7 substances are also subject to the requirements for permanent closure in Rules .0802 and .0803 of this
8 Subchapter;

9 ~~(2) UST systems defined at 40 CFR 280.10(c) are exempted from meeting the requirements of Section~~
10 ~~.0900 of this Subchapter; and~~

11 ~~(3) (2) UST systems defined at 40 CFR 280.10(d) are subject to all of that store fuel solely for use by~~
12 ~~emergency power generators installed on or after November 1, 2007 shall also meet the requirements~~
13 ~~of Section .0900 of this Subchapter.~~

14

15 *History Note: Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h); ~~150B-14(e)~~ 150B-21.6;*

16 *Eff. January 1, 1991;*

17 *Amended Eff. XXXX 1, 2017; November 1, 2007.*

1 15A NCAC 02N .0202 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0202 ~~INTERIM PROHIBITION FOR DEFERRED~~ INSTALLATION REQUIREMENTS**
4 **FOR PARTIALLY EXCLUDED UST SYSTEMS**

5 The ~~provisions for regulations governing "Interim Prohibition for deferred~~ Installation requirements for partially excluded
6 UST systems" ~~contained set forth~~ in 40 CFR 280.11 (Subpart A) have been adopted by reference in accordance with G.S.
7 ~~150B-14(e)~~ are hereby incorporated by reference.

8

9 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;
10 Eff. January 1, 1991, 1991;
11 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0203 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0203 DEFINITIONS**

4 (a) The ~~regulations governing definitions~~ “Definitions” contained set forth in 40 CFR 280.12 ~~(Subpart A)~~ are hereby
5 incorporated by ~~reference~~ reference, including subsequent amendments and editions except ~~that that~~:

6 (1) 40 CFR 280.12 "UST system" shall be changed to read "'UST system' or 'Tank system' means an
7 underground storage tank, connected underground piping, underground ancillary equipment, dispenser,
8 and containment system, if ~~any-~~ any";

9 (2) 40 CFR 280.12 “Class A operator” shall not be incorporated by reference;

10 (3) 40 CFR 280.12 “Class B operator” shall not be incorporated by reference;

11 (4) 40 CFR 280.12 “Class C operator” shall not be incorporated by reference;

12 (5) 40 CFR 280.12 “Replaced” shall not be incorporated by reference; and

13 (6) 40 CFR 280.12 “Secondary containment or secondarily contained” shall not be incorporated by
14 reference.

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

16 (1) "Implementing agency" shall mean the "Division of Waste Management."

17 (2) "Division" shall mean the "Division of Waste Management."

18 (3) "Director" and "Director of the Implementing Agency" shall mean the "Director of the Division of
19 Waste Management."

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

21 (1) "De minimis concentration" means the amount of a regulated substance ~~which that~~ does not exceed
22 one percent (1%) of the capacity of a tank, excluding piping and vent lines.

23 (2) "Expediently emptied after use" means the removal of a regulated substance from an emergency spill
24 or overflow containment UST system within 48 hours after ~~the necessity for~~ use of the UST system has
25 ceased.

26 (3) "Previously closed" means:

27 (A) An UST system from which all regulated substances had been removed, the tank had been
28 filled with a solid inert material, and tank openings ~~were~~ had been sealed or capped prior to
29 December 22, 1988; or

30 (B) An UST system removed from the ground prior to December 22, 1988.

31 (4) "Temporarily closed" means:

32 (A) An UST system from which the product has been removed such that not more than one inch
33 of product and residue are present in any portion of the tank; or

34 (B) Any UST system in use as of December 22, 1988 ~~which that~~ complies with the provisions of
35 15A NCAC 2N ~~.0801~~ .0801.

36 (5) "Secondary containment" means a method or combination of methods of release detection for UST
37 systems that includes:

- 1 (A) For tank installations or replacements completed prior to November 1, 2007, double-walled
2 construction and external liners (including vaults);
- 3 (B) For underground piping installations or replacements completed prior to November 1, 2007,
4 trench liners and double-walled construction;
- 5 (C) For tank installations or replacements completed on or after November 1, 2007, double-
6 walled construction and interstitial release detection monitoring ~~which~~ that meet the
7 requirements of Section .0900 of this Subchapter; and
- 8 (D) For all other UST system component installations or replacements completed on or after
9 November 1, 2007, double-walled construction or containment within a liquid-tight ~~sump,~~
10 sump and interstitial release detection monitoring ~~which~~ that meet the requirements of
11 Section .0900 of this Subchapter. Upon written request, the ~~The~~ Division shall approve other
12 methods of secondary containment for connected piping that it determines are capable of
13 meeting the requirements of Section .0900 of this Subchapter.
- 14 (6) "Interstitial space" means the opening formed between the inner and outer wall of an UST system with
15 double-walled construction or the opening formed between the inner wall of a containment sump and
16 the UST system component that it contains.
- 17 (7) "Replace" means to remove an UST system or UST system component and to install another UST
18 system or UST system component in its place.
- 19 (8) "UST system component or tank system component" means any part of an UST system.

20

21 *History Note:* Authority *G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h); ~~150B-14(e)~~ 150B-21.6;*
22 *Eff. January 1, 1991;*
23 *Temporary Amendment Eff. January 7, 1991 For a Period of 180 Days to Expire on July 6, 1991;*
24 *Temporary Amendment Expired July 6, 1991;*
25 *Amended Eff. XXXX 1, 2017; November 1, 2007.*

1 15A NCAC 02N .0301 is proposed for amendment as follows:

2
3 **15A NCAC 02N .0301 PERFORMANCE STANDARDS FOR UST SYSTEM INSTALLATIONS OR**
4 **REPLACEMENTS COMPLETED AFTER DECEMBER 22, 1988 AND BEFORE NOVEMBER 1, 2007**

5 (a) The regulations governing "Performance standards for new UST systems" ~~contained~~ set forth in 40 CFR 280.20
6 (~~Subpart B~~) are hereby incorporated by ~~reference~~ reference, ~~including subsequent amendments and editions~~ except that:

- 7 (1) 40 CFR 280.20(a)(4) ~~is~~ shall not ~~be~~ incorporated by reference;
8 (2) 40 CFR 280.20(b)(3) ~~is~~ shall not ~~be~~ incorporated by reference; and
9 (3) UST system or UST system component installations or replacements completed on or after November
10 1, 2007, shall also meet the requirements of Section .0900 of this Subchapter.

11 (b) No UST system shall be installed within 100 feet of a well serving a public water system, as defined in ~~15A NCAC~~
12 ~~18C-0102~~ G.S. 130A-313(10), or within 50 feet of any other well supplying water for human consumption.

13 (c) An UST system existing on January 1, ~~1991~~ 1991, and located within the area described in Paragraph (b) of this
14 ~~Rule~~, Rule may be replaced with a new tank meeting the performance standards of 40 CFR 280.20 and the secondary
15 containment provisions of 40 CFR 280.42~~(b)(4)~~ (a) through ~~(4)~~ (d). The replacement UST system ~~may~~ shall not be
16 located nearer to the water supply source than the UST system being replaced.

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

- 19 (1) Within 500 feet of a well serving a public water supply or within 100 feet of any other well supplying
20 water for human consumption; or
21 (2) Within 500 feet of any surface water classified as High Quality Water (HQW), Outstanding Resource
22 water (ORW), WS-I, WS-II or SA.

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

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

28
29 *History Note: Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h); ~~150B-14(e)~~ 150B-21.6;*
30 *Eff. January 1, 1991;*
31 *Amended Eff. XXXX 1, 2017; November 1, 2007*

1 15A NCAC 02N .0302 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0302 UPGRADING OF EXISTING UST SYSTEMS AFTER DECEMBER 22, 1998 AND**
 4 **BEFORE NOVEMBER 1, 2007**

5 (a) The ~~provisions for regulations governing~~ "Upgrading of existing UST systems" ~~contained set forth~~ in 40 CFR 280.21
 6 (~~Subpart B~~) are hereby incorporated by ~~reference~~ reference, ~~including subsequent amendments and editions~~ except that
 7 that:

8 (1) existing UST systems located within the areas ~~defined at~~ described in Rule .0301(b) and (d) of this
 9 Section shall be upgraded in accordance with the provisions of 40 CFR 280.21(b) through (d) and shall be
 10 provided with secondary containment as described ~~at in~~ 40 CFR 280.42~~(b)(4)~~ (a) through ~~(4)~~ (d). An UST
 11 system ~~so~~ upgraded shall not be located nearer to a source of drinking water supply than its location prior to
 12 being ~~upgraded~~ upgraded; and,

13 (2) 40 CFR 280.21 Note to paragraph b(1)(ii)(C) shall not be incorporated by reference.

14 (b) Owners ~~must~~ and operators shall submit notice of the upgrading of any UST system conducted in accordance with the
 15 requirements of 40 CFR 280.21 to the Division, ~~on forms provided by the Division and~~ within 30 days following
 16 completion of the upgrading activity; activity, a description of the upgrading of any UST system conducted in accordance
 17 with the requirements of 40 CFR 280.21. The notice shall include form "UST-8 Notification of Activities Involving
 18 Underground Storage Tank Systems," which is set forth in Rule .0303(1)(b) of this Section.

19 (c) UST systems upgraded in accordance with 40 CFR 280.21 prior to January 1, ~~1994~~ 1991, are in compliance with this
 20 Rule.

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

24

25 *History Note:* Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h); ~~150B-14(e)~~ 150B-21.6;

26 Eff. January 1, 1991;

27 Amended Eff. ~~XXXX~~ 1, 2017; November 1, 2007.

1 15A NCAC 02N .0303 is proposed for amendment as follows:

2
3 **15A NCAC 02N .0303 NOTIFICATION REQUIREMENTS**

4 The regulations governing "Notification requirements" contained set forth in 40 CFR 280.22 (Subpart B) have been
5 adopted are hereby incorporated by reference reference, in accordance with G.S. 150B-14(e) except that:

6 (1) ~~Any owner~~ Owners and operators of an UST system ~~must shall~~ submit to the Division, on forms provided
7 by the Division, a notice of intent to conduct any of the following activities:

8 (a) ~~Installation notice of installation of a new UST system; system or UST system component shall~~
9 be in accordance with Rule .0902;

10 (b) ~~notice of Installation~~ installation of a leak detection device installed outside of the outermost
11 wall of the tank and piping, such as vapor detection or groundwater monitoring ~~devices; and~~
12 devices, shall be given at least 30 days before the activity is begun. The notice shall be provided
13 on form "UST-8 Notification of Activities Involving Underground Storage Tank Systems,"
14 which 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)
15 management/underground-storage-tanks-section/forms. Form "UST-8 Notification of
16 Activities Involving Underground Storage Tank Systems" shall include:

17 (i) the same information provided in Appendix I to 40 CFR 280, except that Sections X
18 (2) and (3), and Section XI shall not be included on the form;

19 (ii) operator identification and contact information;

20 (iii) number of tank compartments and tank compartment identity, capacity, and product
21 stored;

22 (iv) identity of tanks that are manifold together with piping;

23 (v) stage I Vapor Recovery equipment type and installation date;

24 (vi) corrosion protection methods for metal flexible connectors, submersible pumps, and
25 riser pipes;

26 (vii) UST system and UST system component installation date, manufacturer, model, and
27 leak detection monitoring method;

28 (viii) spill containment equipment installation date, manufacturer, model, and leak detection
29 monitoring method;

30 (ix) overflow prevention equipment installation date, manufacturer, and model; and

31 (x) leak detection equipment manufacturer and model;

32 (c) ~~notice of Permanent~~ permanent closure or change-in-service of an UST ~~system; system shall be~~
33 given at least 30 days before the activity begins unless a North Carolina Professional Engineer
34 or North Carolina Licensed Geologist retained by the owner or operator to provide professional
35 services for the tank closure or change-in-service submits the notice. A North Carolina
36 Professional Engineer or North Carolina Licensed Geologist may submit the notice at least five
37 business days before the activity begins. The notice shall be provided on form "UST-3 Notice

1 of Intent: UST Permanent Closure or Change-in-Service.” which may be accessed free of
 2 charge at [5 \(i\) owner identification and contact information;](http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks-</u>

 3 <u>section/forms. Form “UST-3 Notice of Intent: UST Permanent Closure or Change-in-</u>

 4 <u>Service” shall include:</u></p>
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6 (ii) site location information;

7 (iii) site contact information;

8 (iv) contractor and consultant identification and contact information;

9 (v) identity of UST systems to be permanently closed or that will undergo a change-in-
 10 service;

11 (vi) for permanent closure, the proposed method of UST System closure – removal or fill
 12 in-place;

13 (vii) for a change-in-service, the new contents to be stored;

14 (viii) proposed UST system closure or change-in-service date; and

15 (ix) signature of UST system owner;

16 (d) notice of a change of ownership of a UST system pursuant to 40 CFR 280.22(b) shall be
 17 provided on form “UST-15 Change of Ownership of UST System(s),” which may be accessed
 18 free of charge at [20 \(i\) the same information provided in Appendix II to 40 CFR 280;](http://deq.nc.gov/about/divisions/waste-management/underground-storage-</u>

 19 <u>tanks-section/forms. Form “UST-15 Change of Ownership of UST System(s)” shall include:</u></p>
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21 (ii) site location information;

22 (iii) notarized signature of the new owner of an UST system;

23 (iv) name and notarized signature of the previous owner of an UST system; and

24 (v) appended information shall include documentation of an UST system ownership
 25 transfer such as a property deed or bill of sale and for a person signing the form on
 26 behalf of another, such as an officer of a corporation, administrator of an estate,
 27 representative of a public agency, or as having power of attorney, documentation
 28 showing that the person can legally sign in such capacity.

29 ~~(2) Notification as required in Paragraph (1) of this Rule shall be given at least 30 days before the activity is~~
 30 ~~begun except as authorized by the Director.~~

31 ~~(3)~~(2) Owners and operators of UST systems that were in the ground on or after May 8, 1986, were required to
 32 notify the Division in accordance with the Hazardous and Solid Waste Amendments of 1984, Public Law
 33 98-616, on a form published by the Environmental Protection Agency on November 8, 1985 (50-FR
 34 46602) ~~46602~~, unless notice was given pursuant to Section 103(c) of CERCLA. Owners or operators
 35 who have not complied with the notification requirements ~~may shall~~ complete the appropriate ~~the form,~~
 36 ~~provided by the Division,~~ form “UST-8 Notification of Activities Involving Underground Storage Tank
 37 Systems” and submit the form to the Division.

1 ~~(4)~~(3) Beginning October 24, 1988, any person who sells a tank intended to be used as an ~~underground storage~~
2 ~~tank must~~ UST shall notify the purchaser of such tank of the ~~owners's~~ owner's notification obligations
3 under ~~Paragraphs~~ Paragraph (1) and ~~(2)~~ of this Rule.

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

7

8 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h); 143B-282(a)(2)(h); 150B-14(e); 150B-21.6;~~
9 ~~Eff. January 1, 1991. 1991;~~

10 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0304 is proposed for amendment as follows:

2
3 **15A NCAC 02N .0304 IMPLEMENTATION SCHEDULE FOR PERFORMANCE STANDARDS FOR NEW**
4 **UST SYSTEMS AND UPGRADING REQUIREMENTS FOR EXISTING UST SYSTEMS LOCATED IN AREAS**
5 **DEFINED IN RULE .0301(d)**

6 (a) The following implementation schedule shall apply only to owners and operators of UST systems located within
7 areas ~~defined~~ described in Rule .0301(d) of this Section. This implementation schedule shall ~~be used by the Department~~
8 ~~for govern~~ tank owners and operators ~~to comply~~ in complying with the secondary containment requirements ~~contained set~~
9 forth in Rule .0301(d) for new UST systems and the secondary containment requirements ~~contained~~ set forth in Rule
10 .0302(a) for existing UST systems.

- 11 (1) All new UST systems and replacements to an UST system shall be provided with secondary
12 containment as of April 1, 2001.
- 13 (2) All steel or metal connected piping and ancillary equipment of an UST, regardless of date of
14 installation, shall be provided with secondary containment as of January 1, 2005.
- 15 (3) All fiberglass or non-metal connected piping and ancillary equipment of an UST, regardless of date of
16 installation, shall be provided with secondary containment as of January 1, 2008.
- 17 (4) All UST systems installed on or before January 1, 1991 shall be provided with secondary containment
18 as of January 1, 2008.
- 19 (5) All USTs installed after January 1, 1991, and prior to April 1, 2001, shall be provided with secondary
20 containment as of January 1, 2020. Owners of USTs located within 100 to 500 feet of a public water
21 supply well, if the well serves only a single facility and is not a community water ~~system~~ system, may
22 seek a variance in accordance with Paragraphs (d) through (i) of this Rule.

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

- 25 (1) ~~Installation of an~~ An automatic tank gauging system for each UST;
- 26 (2) ~~Installation of an~~ An electronic line leak detector for each pressurized piping system;
- 27 (3) ~~Conducting one~~ One 0.1 gallon per hour (gph) test per month or one 0.2 gph test per week on each
28 UST system;
- 29 (4) ~~Conducting a~~ A line tightness test capable of detecting a leak rate of 0.1 gph, once per year for each
30 suction piping system. No release detection ~~is~~ shall be required for suction piping that is designed and
31 constructed in accordance with 40 CFR 280.41(b)(2)(i) ~~(1)(ii)(A)~~ through ~~(v)~~ (E);
- 32 (5) If the UST system is located within 500 feet of a public water supply well or within 100 feet of any
33 other well supplying water for human consumption, owners or operators shall sample the water supply
34 well at least once per year. The sample collected from the well shall be characterized in accordance
35 with:
- 36 (A) Standard Method 6200B, Volatile Organic Compounds Purge and Trap Capillary-Column
37 Gas Chromatographic/Mass Spectrometric Method, which is incorporated by ~~reference,~~

1 reference including subsequent amendments and editions, and may be obtained at
2 <http://www.standardmethods.org/> at a cost of sixty-nine dollars (\$69.00);

3 (B) EPA Method 625, Base/Neutrals and Acids, which is incorporated by ~~reference~~, reference
4 including subsequent amendments and editions, and may be accessed free of charge at
5 [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)
6 [organics_625.pdf](http://water.epa.gov/scitech/methods/cwa/organics/upload/2007_07_10_methods_method_organics_625.pdf) ; and

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

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

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

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

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

29 (2) UST systems are operated and maintained in compliance with all applicable federal laws and
30 regulations and state laws and rules.

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

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

35 (2) Groundwater depth and flow direction; and

36 (3) Leak detection monitoring and testing results.

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

- 4 (1) Increased frequency of leak detection and leak prevention monitoring and testing;
- 5 (2) Periodic water supply well sampling; and
- 6 (3) Increased reporting and recordkeeping.

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

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

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

14
15 *History Note: Authority G.S. 143-215.3(a)(15); 143B-282(a)(2)(h);*
16 *Temporary Adoption Eff. May 1, 2000;*
17 *Eff. April 1, 2001;*
18 *Amended Eff. XXXX 1, 2017; June 1, 2015; November 1, 2007.*

1 15A NCAC 02N .0401 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0401 SPILL AND OVERFILL CONTROL**

4 The ~~provisions for regulations governing~~ “Spill and overfill control” ~~contained set forth~~ in 40 CFR 280.30 ~~(Subpart C)~~
5 ~~have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;
8 Eff. January 1, 1991; 1991;
9 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0402 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0402 OPERATION AND MAINTENANCE OF CORROSION PROTECTION**

4 The ~~provisions for regulations governing~~ “Operation and maintenance of corrosion protection” ~~contained set forth~~ in 40
5 CFR 280.31 (~~Subpart C~~) ~~have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;

8 Eff. January 1, 1991; 1991;

9 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0403 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0403 COMPATIBILITY**

4 The ~~provisions for~~ regulations governing “Compatibility” ~~contained set forth~~ in 40 CFR 280.32 (~~Subpart C~~) ~~have~~
5 ~~been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h) 143B-282(a)(2)(h); 150B-14(e)~~

8

150B-21.6;

9

Eff. January 1, ~~1991~~. 1991;

10

Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0404 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0404 REPAIRS ALLOWED**

4 The regulations governing “Repairs Allowed” provisions contained set forth in 40 CFR 280.33 (~~Subpart C~~) ~~have been~~
5 ~~adopted by reference in accordance with G.S. 150B-14(e)~~ are hereby incorporated by reference, except that the first
6 sentence of 40 CFR 280.33(d) shall be read: “Repairs to secondary containment areas of tanks and piping used for
7 interstitial monitoring and to containment sumps used for interstitial monitoring of piping shall have the secondary
8 containment tested for tightness as directed by the Division within 30 days following the date of completion of the
9 repair.” When determining the required test method, the Division may consider the following:

- 10 (1) installation date of the repaired UST system component;
11 (2) test methods that are third-party certified as being capable of detecting a 0.10 gallon per hour leak rate
12 with a probability of detection (Pd) of at least 95 percent and a probability of false alarm (Pfa) of no
13 more than 5 percent;
14 (3) codes of practice developed by a nationally recognized association;
15 (4) written manufacturer’s guidelines for installation testing and/or testing after repairs are conducted; and
16 (5) test methods developed by an independent laboratory.

17

18 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;
19 Eff. January 1, 1991, 1991;
20 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0405 is proposed for amendment as follows:
2

3 **15A NCAC 02N .0405 REPORTING AND RECORDKEEPING**

4 (a) The regulations governing "Reporting and recordkeeping" procedures contained set forth in 40 CFR 280.34
5 (Subpart C) have been adopted are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6 (b) Owners and operators ~~must also~~ shall submit to the Division, ~~on forms provided by the Division and~~ within 30 days
7 following completion, results of the site investigation conducted:

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

10 (a) site location information;

11 (b) identification and contact information for the owner, operator, property owner, consultant,
12 contractor, and analytical laboratory;

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

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

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

18 (f) description of site characteristics, such as use of the site and surrounding area, drinking water
19 supplies, presence and location of water supply wells and surface water, depth to and nature
20 of bedrock, depth to groundwater, and direction of groundwater flow;

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

22 (h) procedures and methods used to clean an UST system prior to permanent closure or change-
23 in-service;

24 (i) procedures and methods used to permanently close an UST system;

25 (j) description of condition of tank, piping, and dispenser;

26 (k) documentation of disposal of tank and its contents;

27 (l) description of condition of excavation, volume of soil excavation, soil type encountered, type
28 and source of backfill used, and any groundwater, free product, or bedrock encountered in the
29 excavation;

30 (m) method of temporary storage, sampling, and treatment or disposal of excavated soil;

31 (n) procedures and methods used for sample collection, field screening, and laboratory analysis;

32 (o) quality assurance and quality control procedures and methods for decontamination of field
33 and sampling equipment and for sample handling, preservation, and transportation;

34 (p) field screening results and analytical results for samples collected, comparison of analytical
35 results to standards set forth in 15A NCAC 02L, and the presence and quantity of any free
36 product; and

- 1 (q) maps and figures showing the site and surrounding topography, current and former UST
 2 system locations, surface water, water supply wells, monitoring wells, types and locations of
 3 samples, analytical results for samples, ground water flow direction, geologic boring logs,
 4 and monitoring well construction specifications; or
- 5 (2) to insure compliance with the requirements for installation of vapor monitoring and groundwater
 6 monitoring devices, as specified in 40 CFR 280.43(e)(1) through (e)(4) and 280.43(f)(1) through
 7 (f)(5), respectively. The site investigation shall be conducted in accordance with 15ANCAC 2N .0504.
- 8 (c) Owners ~~must~~ shall submit to the Division, on forms provided by the ~~Division, Division~~ and within 30 days following
 9 completion:
- 10 (1) A description of the upgrading of any UST system conducted in accordance with requirements of 40
 11 CFR ~~280.21; 280.21~~. The description of upgrading shall be provided on form “UST-8 Notification of
 12 Activities Involving Underground Storage Tank Systems,” which is set forth in Rule .0303(1)(b) of this
 13 Section;
- 14 (2) Certification of the proper operation of a corrosion protection system upon completion of testing ~~and~~
 15 ~~at a frequency and in a manner specified in compliance with 40 CFR 280.31; and~~
- 16 (a) Certification of proper operation and testing of a galvanic corrosion protection system shall
 17 be provided on form “UST-7A Cathodic Protection System Evaluation for Galvanic
 18 (Sacrificial Anode) Systems,” which may be accessed free of charge at
 19 <http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks->
 20 section/forms. Form “UST-7A Cathodic Protection System Evaluation for Galvanic
 21 (Sacrificial Anode) Systems” shall include:
- 22 (i) owner identification and contact information;
 23 (ii) site location information;
 24 (iii) reason that a corrosion protection system was evaluated, including a routine test within
 25 six months of corrosion protection system installation, a routine test every three years
 26 following corrosion protection system installation, or a test following a repair or
 27 modification;
 28 (iv) corrosion protection tester’s name, contact information, corrosion protection tester
 29 certification number, certifying organization, and certification type;
 30 (v) corrosion protection tester’s evaluation, including pass, fail, or inconclusive;
 31 (vi) corrosion expert’s name, address, contact information, National Association of
 32 corrosion Engineers certification number, and certification type or Professional
 33 Engineer number, state, and specialty;
 34 (vii) corrosion expert’s evaluation, including pass or fail;
 35 (viii) criteria for evaluation including 850 millivolt on, 850 millivolt instant off, or 100
 36 millivolt polarization;
 37 (ix) action required as a result of the evaluation, including none, or repair and retest;

- 1 (x) description of UST system, including tank identity, product stored, tank capacity,
2 tank and piping construction material, and presence of metal flexible connectors;
3 (xi) description of any repair or modification made to the corrosion protection system;
4 (xii) site drawing, including the UST systems, on-site buildings, adjacent streets, anodes
5 and wires, reference electrode placement, and test stations;
6 (xiii) corrosion protection continuity survey, including location of fixed remote reference
7 electrode placement, structures evaluated using fixed remote voltages or point to
8 point voltage differences, and if structures are continuous or isolated; and
9 (xiv) corrosion protection system survey, including locations of remote reference
10 electrode, structure evaluated, structure contact point, local reference cell
11 placement, local voltage, remote voltage, and if tested structure passed, failed, or
12 was inconclusive relative to the criteria for evaluation.

13 (b) Certification of proper operation and testing of an impressed current corrosion protection
14 system shall be provided on form “UST-7B Cathodic Protection System Evaluation for
15 Impressed Current Systems,” which may be accessed free of charge at
16 <http://deq.nc.gov/about/divisions/waste-management/underground-storage-tanks->
17 section/forms. Form “UST-7B Cathodic Protection System Evaluation for Impressed Current
18 Systems” shall include:

- 19 (i) owner identification and contact information;
20 (ii) site location information;
21 (iii) reason that a corrosion protection system was evaluated, including a routine test within
22 six months of corrosion protection system installation, a routine test every three years
23 following corrosion protection system installation, or a test following a repair or
24 modification;
25 (iv) corrosion protection tester’s name, contact information, corrosion protection tester
26 certification number, certifying organization, and certification type;
27 (v) corrosion protection tester’s evaluation, including pass, fail, or inconclusive;
28 (vi) corrosion expert’s name, address, contact information, National Association of
29 Corrosion Engineers certification number, and certification type or Professional
30 Engineer number, state, and specialty;
31 (vii) corrosion expert’s evaluation, including pass or fail;
32 (viii) criteria for evaluation, including 850 millivolt instant off or 100 millivolt
33 polarization;
34 (ix) action required as a result of the evaluation, including none or repair and retest;
35 (x) description of UST system, including tank identity, product stored, tank capacity,
36 tank and piping construction material, and presence of metal flexible connectors;

- 1 (xi) impressed current rectifier data, including rectifier manufacturer, model, serial
 2 number rated DC output, shunt size, shunt factor, hour meter, tap settings, DC
 3 output (gauge), and DC output (multimeter);
 4 (xii) impressed current positive and negative circuit measurements;
 5 (xiii) description of any repair or modifications made to the corrosion protection system;
 6 (xiv) site drawing, including the UST systems, on-site buildings, adjacent streets, anodes
 7 and wires, reference electrode placement, and test stations;
 8 (xv) corrosion protection continuity survey, including location of fixed remote reference
 9 electrode placement, structures evaluated using fixed remote instant off voltages or
 10 point to point voltage differences, and if structures are continuous or isolated; and
 11 (xvi) corrosion protection system survey, including structure evaluated, structure contact
 12 point, reference cell placement, on voltage, instant off voltage, 100 millivolt
 13 polarization ending voltage and voltage change, and if the tested structure passed or
 14 failed relative to the criteria for evaluation.

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

23 History Note: ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h) 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;~~
 24 ~~Eff. January 1, 1991, 1991;~~
 25 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0406 is proposed for adoption as follows:

2

3 **15A NCAC 02N .0406 PERIODIC TESTING OF SPILL PREVENTION EQUIPMENT AND CONTAINMENT**
4 **SUMPS USED FOR INTERSTITIAL MONITORING OF PIPING AND PERIODIC INSPECTION OF**
5 **OVERFILL PREVENTION EQUIPMENT**

6 The regulations governing "Periodic testing of spill prevention equipment and containment sumps used for interstitial
7 monitoring of piping and periodic inspection of overfill prevention equipment" set forth in 40 CFR 280.35 are hereby
8 incorporated by reference, except that UST system or UST system component installations or replacements completed on
9 or after November 1, 2007, shall meet the requirements of Section .0900 of this Subchapter.

10

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

12 Eff. XXXX 1, 2017.

1 15A NCAC 02N .0407 is proposed for adoption as follows:

2

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

4 The regulations governing "Periodic operation and maintenance walkthrough inspections" set forth in 40 CFR 280.36 are
5 hereby 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. XXXX 1, 2017.

9

1 15A NCAC 02N .0501 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0501 GENERAL REQUIREMENTS FOR ALL UST SYSTEMS**

4 The regulations governing "General requirements for all UST systems" ~~provisions contained~~ set forth in 40 CFR 280.40
5 ~~(Subpart D) have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note: ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;*
8 *~~Eff. January 1, 1991. 1991;~~*
9 *Amended Eff. XXXX 1, 2017.*

1 15A NCAC 02N .0502 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0502 REQUIREMENTS FOR PETROLEUM UST SYSTEMS**

4 The regulations governing "Requirements for petroleum UST systems" ~~provisions contained~~ set forth in 40 CFR 280.41
5 (~~Subpart D~~) are hereby incorporated by ~~reference~~ reference, ~~including subsequent amendments and editions~~ except that
6 UST systems located within areas ~~defined~~ described in Rule .0301(d) of this Subchapter ~~must~~ shall meet the requirements
7 for secondary containment described at 40 CFR 280.42 ~~(+)~~ (a) through ~~(+)~~ (d) if the UST system installation or
8 replacement was completed before November 1, 2007. UST system or UST system component installations or
9 replacements completed on or after November 1, 2007, ~~must~~ shall meet the secondary containment requirements of
10 Section .0900 of this Subchapter.

11

12 History Note: *Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h); ~~150B-14(e)~~ 150B-21.6;*

13 *Eff. January 1, 1991;*

14 *Amended Eff. XXXX 1, 2017; November 1, 2007.*

1 15A NCAC 02N .0503 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0503 REQUIREMENTS FOR HAZARDOUS SUBSTANCE UST SYSTEMS**

4 The regulations governing "Requirements for hazardous substance UST systems" ~~provisions contained~~ set forth in 40
5 CFR 280.42 (~~Subpart D~~) are hereby incorporated by ~~reference~~ reference, ~~including subsequent amendments and editions~~
6 except that hazardous substance UST systems or UST system components installed or replacements completed on or after
7 November 1, ~~2007~~ 2007, ~~must~~ shall meet the secondary containment requirements of Section .0900 of this Subchapter.

8

9 *History Note:* Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h); ~~150B-14(e)~~ 150B-21.6;

10 *Eff. January 1, 1991;*

11 *Amended Eff. XXXX 1, 2017; November 1, 2007.*

1 15A NCAC 02N .0504 is proposed for amendment as follows:

2
3 **15A NCAC 02N .0504 METHODS OF RELEASE DETECTION FOR TANKS**

4 (a) The regulations governing "Methods of release detection for tanks" ~~contained set forth~~ in 40 CFR 280.43 (~~Subpart D~~)
5 ~~have been adopted~~ are hereby incorporated by reference ~~reference~~, in accordance with G.S. 150B-14(e) except that: that

6 (1) ~~40 CFR 280.43 (d)(2) is amended to read: "Inventory control, or another test of equivalent performance~~
7 ~~approved by the Department, conducted in accordance with the requirements of 40 CFR 280.43(a)";~~

8 (2) ~~40 CFR 280.43(f)(7) is amended to read: "Within and immediately below the UST system excavation~~
9 ~~zone, the site is assessed to ensure compliance with the requirements of 40 CFR 280.43(f)(1) through~~
10 ~~(f)(5), as modified by this Rule, and to establish the number and positioning of monitoring wells or~~
11 ~~devices that will detect releases from any portion of the tank that routinely contains products"; and~~

12 (3) ~~40 CFR 280.43(f)(3), (f)(4), and (f)(5) are~~ shall not be adopted by reference.

13 (b) Wells used for monitoring or testing for ~~liquids on~~ free product in the groundwater shall be:

14 (1) Located as follows:

15 (A) for new installations, ~~located~~ within and at the end of the excavation having the lowest
16 elevation and along piping at intervals not exceeding 50 feet; or

17 (2) (B) for existing installations, ~~located~~ in the excavation zone or as near to it as technically
18 feasible and installed in a borehole at least four inches larger than the diameter of the
19 casing;

20 (3) (2) A minimum of two inches in diameter. The number of wells installed ~~must~~ shall be sufficient to detect
21 releases from the UST system;

22 (4) (3) Equipped with a screen that extends from two feet below land surface to a depth of 20 feet below land
23 surface or two feet below the seasonal low water level, whichever is shallower. The screen shall be
24 designed and installed to prevent the migration of natural soils or filter pack into the well while allowing
25 the entry of regulated substances into the well under both high and low groundwater level conditions;

26 (5) (4) Surrounded with a clean sand or gravel to the ~~the~~ top of the screen, plugged and grouted the remaining
27 distance to finished grade with cement grout;

28 (6) (5) Constructed of a permanent casing and screen material that is inert to the stored substance and is
29 corrosion resistant;

30 (7) (6) Developed upon completion of installation until the water is clear and ~~relatively~~ sediment free;

31 (8) (7) Protected with a water-tight cover and lockable cap;

32 (9) (8) Labeled as a liquid monitor well; and

33 (10) (9) Equipped with a continuously operating liquid leak detection device; or

34 (A) For tanks storing petroleum products, tested at least once every 14 days with a device or
35 hydrocarbon-sensitive paste capable of detecting the liquid stored; or

36 (B) For tanks storing hazardous substances, sampled and tested at least once every 14 days for the
37 presence of the stored substance.

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

4 (d) Any person completing or abandoning any ~~well, well~~ used for testing of vapors or monitoring for ~~liquids on free product~~
5 ~~in the groundwater, groundwater~~ shall submit the record required by Rule 15A NCAC 2C .0114(b) of the ~~Well Construction~~
6 ~~Standards (15A NCAC 2C .0100)~~.

7 ~~(e) The site assessments required by 40 CFR 280.43(e)(6) and 40 CFR 280.43(f)(7) shall be conducted by or under the~~
8 ~~supervision of a person qualified to assess site conditions.~~

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

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

1 15A NCAC 02N .0505 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0505 METHODS OF RELEASE DETECTION FOR PIPING**

4 The regulations governing "Methods of release detection for piping" ~~provisions contained~~ set forth in 40 CFR 280.44
5 ~~(Subpart D) have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7

8 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h); 150B-14(e); 150B-21.6;~~

9 ~~Eff. January 1, 1991. 1991;~~

10 ~~Amended Eff. XXXX 1, 2017.~~

1 15A NCAC 02N .0506 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0506 RELEASE DETECTION RECORDKEEPING**

4 The ~~provisions for regulations governing~~ "Release detection recordkeeping" ~~contained set forth~~ in 40 CFR 280.45 (Subpart
5 ~~D~~) ~~have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note: ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;*
8 *Eff. January 1, 1991.*
9 *Amended Eff. XXXX 1, 2017.*

1 15A NCAC 02N .0601 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0601 REPORTING OF SUSPECTED RELEASES**

4 The ~~provisions for regulations governing~~ "Reporting of suspected releases" ~~contained set forth~~ in 40 CFR 280.50 (Subpart
5 E) ~~have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e)~~, except that the words,
6 words "or another reasonable ~~time~~ period specified by the implementing agency," ~~are~~ shall be deleted from the first sentence.

7

8 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;

9

Eff. January 1, 1991. 1991;

10

Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0602 is proposed for amendment as follows:

2

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

4 The regulations governing "Investigation due to off-site impacts" ~~provisions contained set forth~~ in 40 CFR 280.51 (Subpart
5 ~~E) have been adopted~~ are hereby incorporated by reference in accordance with G.S. 150B-14(e).

6

7 *History Note: Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h); ~~150B-14(e)~~ 150B-21.6;*

8

Eff. January 1, ~~1991~~ 1991;

9

Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0603 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0603 RELEASE INVESTIGATION AND CONFIRMATION STEPS**

4 The regulations governing "Release investigation and confirmation steps" provisions contained set forth in 40 CFR 280.52
 5 ~~(Subpart E) have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e),~~ except that in 40
 6 CFR 280.52 the words "or another reasonable time period specified by the implementing agency" shall not be adopted by
 7 reference. ~~the first sentence shall read: "Unless corrective action is initiated in accordance with Subpart F, owners must~~
 8 ~~immediately investigate and confirm all suspected releases of regulated substances requiring reporting under 40 CFR 280.50~~
 9 ~~within seven days, unless approval for an extension of time has been granted by the Division before the seven days have~~
 10 ~~expired, and only upon a showing of good cause by the owner or operator of the UST system. In conducting such~~
 11 ~~investigations, owners and operators must use either the following steps or another procedure approved by the Division."~~
 12 Upon written request, the Division may grant additional time to investigate and confirm suspected releases as specified in 40
 13 CFR 280.53. The request shall be made to the Division prior to the expiration of the required time period. When considering
 14 such a request, the Division may consider factors as follows:

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

21

22

23 *History Note: ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h) 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;~~*
 24 *Eff. January 1, 1991. 1991;*
 25 *Amended Eff. XXXX 1, 2017.*

1 15A NCAC 02N .0604 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0604 REPORTING AND CLEANUP OF SPILLS AND OVERFILLS**

4 The regulations governing "Reporting and cleanup of spills and overfills" provisions contained set forth in 40 CFR 280.53
 5 ~~(Subpart E) have been adopted~~ are hereby incorporated by reference in accordance with G.S. 150B-14(e), except that:

6 (1) In 40 CFR 280.53(a) and (b), the ~~words, words~~ "or another reasonable time period specified by the
 7 implementing agency," "agency" are shall not be adopted by reference;

8 (2) In 40 CFR 280.53(a)(1) and (b), the words, "or another reasonable amount specified by the implementing
 9 agency" ~~are shall~~ not be adopted by reference; and

10 (3) ~~The time periods within which reports required by the provisions of 40 CFR 280.53 must shall be~~
 11 ~~submitted to~~ Upon written request, the Division may be extended upon approval of requests made to the
 12 Division by the owner or operator, before the expiration of the grant additional time period and upon a
 13 showing of good cause, to submit the reports specified in 40 CFR 280.53. The request shall be made to
 14 the Division prior to the expiration of the required time period. When considering such a request, the
 15 Division may consider factors as follows:

16 (a) the extent to which the request for additional time is due to factors outside of the
 17 control of the tank owner or operator;

18 (b) the previous history of the tank owner or operator submitting the report in
 19 complying with deadlines established under the Commission's rules;

20 (c) the technical complications associated with reporting and cleanup of spills and
 21 overfills; and

22 (d) the necessity for action to eliminate an imminent threat to public health or the
 23 environment.

24

25 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h) 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;~~
 26 ~~Eff. January 1, 1991. 1991;~~

27 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0701 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0701 GENERAL**

4 (a) The regulations governing "General" provisions contained set forth in 40 CFR 280.60 (~~Subpart F~~) ~~have been adopted~~
5 are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6 (b) Any corrective action undertaken in accordance with this Section ~~must~~ shall meet the requirements and standards
7 specified in 15A NCAC 2L.

8

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

10 *Eff. January 1, 1991.*

11 *Amended Eff. September 1, 1992.*

12 *Temporary Amendment Eff. January 2, 1998;*

13 *Amended Eff. XXXX 1, 2017; October 29, 1998.*

1 15A NCAC 02N .0702 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0702 INITIAL RESPONSE**

4 The ~~provisions for regulations governing "Initial response" contained set forth~~ in 40 CFR 280.61 (Subpart F) ~~have been~~
5 ~~adopted~~ are hereby incorporated by reference ~~reference, in accordance with G.S. 150B-14(e)~~ except that the ~~words, words~~
6 "or another reasonable ~~time~~ period of time ~~specified~~ determined by the implementing ~~agency,~~ agency" in the first
7 sentence ~~are~~ shall not be adopted by reference.

8

9 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;
10 Eff. January 1, 1991, 1991;
11 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0703 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0703 INITIAL ABATEMENT MEASURES AND SITE CHECK**

4 The ~~provisions for regulations governing~~ "Initial abatement measures and site check" ~~contained set forth~~ in 40 CFR 280.62
5 (~~Subpart F~~) are hereby incorporated by ~~reference~~ reference, ~~including subsequent amendments and editions~~ except that:

6 (1) 40 CFR 280.62(a)(6) ~~is rewritten to shall~~ read, "Investigate to determine the possible presence of free
7 ~~product, product and begin free product removal within 14 days in accordance with 40 CFR 280.64,~~
8 280.64." ~~unless approval for an extension of time has been granted by the Division upon a showing of~~
9 ~~good cause, prior to the expiration of the time period"~~ Upon written request, the Division may grant
10 additional time to begin free product removal. The request shall be made to the Division prior to the
11 expiration of the required time period. When considering such a request, the Division may consider
12 factors as follows:

13 (a) the extent to which the request for additional time is due to factors outside of the
14 control of the tank owner or operator;

15 (b) the previous history of the tank owner or operator submitting the report in
16 complying with deadlines established under the Commission's rules;

17 (c) the technical complications associated with free product removal; and

18 (d) the necessity for action to eliminate an imminent threat to public health or the
19 environment; and

20 (2) In 40 CFR 280.62(b) the words, "or within another reasonable period of time determined by the
21 implementing agency," ~~are shall~~ shall not ~~be~~ adopted by reference.

22

23 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h) 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;~~
24 ~~Eff. January 1, 1991. 1991;~~
25 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0704 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0704 INITIAL SITE CHARACTERIZATION**

4 The ~~provisions for regulations governing~~ "Initial site characterization" ~~contained set forth~~ in 40 CFR 280.63 (~~Subpart F~~)
 5 ~~have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e)~~, except that in 40 CFR
 6 280.63(b) the ~~words,~~ words "or another reasonable period of time determined by the implementing ~~agency,~~" agency" are
 7 ~~replaced by the words,~~ "unless prior approval has been granted by the Division upon a showing of good cause, before the 45
 8 days have expired." ~~shall not be adopted by reference.~~ Upon written request, the Division may grant additional time to
 9 submit the information collected in compliance with 280.63(a). The request shall be made to the Division prior to the
 10 expiration of the required time period. When considering such a request, the Division may consider factors as follows:

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

17

18

19 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;
 20 Eff. January 1, 1991- 1991;
 21 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0705 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0705 FREE PRODUCT REMOVAL**

4 The ~~provisions for regulations governing~~ "Free product removal" ~~contained set forth~~ in 40 CFR 280.64 (~~Subpart F~~) have
5 ~~been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h); 150B-14(e); 150B-21.6;~~
8 ~~Eff. January 1, 1991. 1991;~~
9 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0706 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0706 INVESTIGATIONS FOR SOIL AND ~~GROUND WATER~~ GROUNDWATER CLEANUP**

4 The ~~provisions for regulations governing~~ "Investigations for soil and groundwater cleanup" ~~contained set forth~~ in 40 CFR
5 280.65 (Subpart F) ~~have been adopted~~ are hereby incorporated by reference in accordance with G.S. 150B-14(e).

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h); 143B-282(a)(2)(h); 150B-14(e); 150B-21.6;~~

8 ~~Eff. January 1, 1991; 1991;~~

9 ~~Amended Eff. XXXX 1, 2017.~~

1 15A NCAC 02N .0707 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0707 CORRECTIVE ACTION PLAN**

4 The ~~provisions for a regulations governing~~ "Corrective action plan" ~~contained set forth~~ in 40 CFR 280.66 (Subpart F) have
5 been ~~are hereby~~ incorporated by ~~reference~~ reference, including any subsequent amendments and editions with the exception
6 of the following Paragraph. ~~except that~~ This material is available for inspection at the Department of Environment and
7 Natural Resources, Division of Water Quality, Groundwater Section, 2728 Capital Boulevard, Raleigh, North Carolina.
8 Copies of 40 CFR Parts 260 to 299 may be obtained from the Superintendent of Documents, Government Printing Office,
9 Washington, D.C., 20402 at a cost of thirty one dollars (\$31.00). 40 CFR 280.66(a) has been rewritten to shall read: "At any
10 point after ~~After~~ reviewing the information submitted in compliance with 40 CFR 280.61 through 40 CFR 280.63, the
11 Division may require owners and operators to submit additional information or to develop and submit a corrective action
12 plan for responding to contaminated soils and groundwater. If a plan is required, owners and operators must prepare a plan in
13 accordance with the requirements specified in 15A NCAC ~~2L~~, 2L, and submit it according to a schedule and format
14 established by the Division. Owners and operators are responsible for submitting a plan that provides for adequate protection
15 of human health and the environment as determined by the Division, and must modify their plan as necessary to meet this
16 standard".

17

18 *History Note:* ~~Statutory~~ Authority G.S. 143-215.3(a)(15); ~~143B-282(2)(h)~~ 143B-282(a)(2)(h);

19 *Eff. January 1, 1991;*

20 *Amended Eff. September 1, 1992.*

21 *Temporary Amendment Eff. January 2, 1998;*

22 *Amended Eff. XXXX 1, 2017; October 29, 1998.*

1 15A NCAC 02N .0708 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0708 PUBLIC PARTICIPATION**

4 The ~~provisions for regulations governing~~ "Public participation" ~~contained set forth~~ in 40 CFR 280.67 (~~Subpart F~~) ~~have been~~
5 ~~adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;
8 Eff. January 1, 1991. 1991;
9 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0801 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0801 TEMPORARY CLOSURE**

4 The ~~provisions for regulations governing~~ "Temporary closure" ~~contained set forth~~ in 40 CFR 280.70 (Subpart G) ~~have been~~
5 ~~adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;

8

Eff. January 1, 1991. 1991;

9

Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0802 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0802 PERMANENT CLOSURE AND CHANGES-IN-SERVICE**

4 The ~~provisions for regulations governing~~ "Permanent closure and changes-in-service" ~~contained set forth~~ in 40 CFR 280.71
5 (~~Subpart G~~) are hereby incorporated by ~~reference~~ reference, including subsequent amendments and editions except that an
6 UST system containing de minimis concentrations of a regulated substance ~~must~~ shall meet the closure requirements of this
7 Rule within 12 months of the effective date of this Subchapter.

8

9 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h); 143B-282(a)(2)(h); 150B-14(e); 150B-21.6;~~
10 ~~Eff. January 1, 1991. 1991;~~
11 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0803 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0803 ASSESSING THE SITE AT CLOSURE OR CHANGE-IN-SERVICE**

4 The ~~provisions for regulations governing~~ "Assessing the site at closure or change-in-service" ~~contained set forth~~ in 40 CFR
5 280.72 (~~Subpart G~~) ~~have been adopted~~ are hereby incorporated by reference in accordance with G.S. 150B-14(e), except
6 that:

7 (1) references to methods and requirements ~~have been expanded to~~ shall include all applicable references and
8 methods listed in 15A NCAC 2N .0504; and

9 (2) ~~site assessments shall be conducted by a person qualified to assess site conditions; and~~

10 (3) the number and location of ~~samples~~, samples and method of their ~~collections~~ collection shall be
11 determined in accordance with procedures established by the ~~Department~~ Division. In establishing
12 procedures, the Division may consider factors such as:

13 (a) dimensions of the USTs;

14 (b) type of products stored in the USTs;

15 (c) method of closure;

16 (d) type of and length of associated product lines;

17 (e) number of associated dispensers;

18 (f) number of associated containment sumps;

19 (g) methods of field sample analysis and laboratory sample analysis;

20 (h) potential for vapor intrusion;

21 (i) proximity to surface waters; and

22 (j) site conditions such as site geology and hydrology.

23

24 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h); 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;~~
25 ~~Eff. January 1, 1991. 1991;~~
26 ~~Amended Eff. XXXX 1, 2017.~~

1 15A NCAC 02N .0804 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0804 APPLICABILITY TO PREVIOUSLY CLOSED UST SYSTEMS**

4 The regulations governing "Applicability to previously closed UST systems" ~~provisions contained~~ set forth in 40 CFR
5 280.73 (~~Subpart G~~) ~~have been adopted~~ are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note:* ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h)~~ 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;

8 Eff. January 1, 1991. 1991;

9 Amended Eff. XXXX 1, 2017.

1 15A NCAC 02N .0805 is proposed for amendment as follows:

2

3 **15A NCAC 02N .0805 CLOSURE RECORDS**

4 The regulations governing "Closure records" ~~provisions contained set forth~~ in 40 CFR 280.74 (~~Subpart G~~) ~~have been~~
5 adopted are hereby incorporated by reference ~~in accordance with G.S. 150B-14(e).~~

6

7 *History Note: ~~Statutory Authority G.S. 143-215.3(a)(15); 143B-282(2)(h) 143B-282(a)(2)(h); 150B-14(e) 150B-21.6;~~*
8 *Eff. January 1, ~~1991~~. 1991;*
9 *Amended Eff. XXXX 1, 2017.*

1 15A NCAC 02N .1001 is proposed for adoption as follows:

2

3 **15A NCAC 02N .1001 DEFINITIONS**

4 The regulations governing "UST systems with field-constructed tanks and airport hydrant fuel distribution systems" set forth
5 in 40 CFR 280.250 are hereby 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. XXXX 1, 2017.

1 15A NCAC 02N .1002 is proposed for adoption as follows:

2

3 **15A NCAC 02N .1002 GENERAL REQUIREMENTS**

4 The regulations governing "General Requirements" set forth in 40 CFR 280.251 are hereby incorporated by reference.

5

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

7

Eff. XXXX 1, 2017.

1 15A NCAC 02N .1003 is proposed for adoption as follows:

2

3 **15A NCAC 02N .1003 ADDITIONS, EXCEPTIONS, AND ALTERNATIVES FOR UST SYSTEMS WITH**
4 **FIELD-CONSTRUCTED TANKS AND AIRPORT HYDRANT SYSTEMS**

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

7 (1) Piping associated with UST systems with field-constructed tanks less than or equal to 50,000 gallons not
8 part of an airport hydrant fueling system shall meet the requirements of Section .0900 of this Subchapter;
9 and

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

12

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

14 Eff. XXXX 1, 2017.

1 15A NCAC 02O .0309 is proposed for adoption as follows:

2

3 **15A NCAC 02O .0309 LOCAL GOVERNMENT BOND RATING TEST**

4 The regulations governing "Local Government Bond Rating Test" set forth in 40 CFR 280.104 are hereby incorporated
5 by reference.

6

7 History Note: Authority G.S. 143-215.94H; 150B-21.6;
8 Eff. XXXX 1, 2017.

1 15A NCAC 02O .0310 is proposed for adoption as follows:

2

3 **15A NCAC 02O .0310 LOCAL GOVERNMENT FINANCIAL TEST**

4 The regulations governing "Local Government Financial Test" set forth in 40 CFR 280.105 are hereby incorporated by
5 reference.

6

7 History Note: Authority G.S. 143-215.94H; 150B-21.6;
8 Eff. XXXX 1, 2017.

1 15A NCAC 02O .0311 is proposed for adoption as follows:

2

3 **15A NCAC 02O .0311 LOCAL GOVERNMENT GUARANTEE**

4 The regulations governing "Local Government Guarantee" set forth in 40 CFR 280.106 are hereby incorporated by
5 reference.

6

7 History Note: Authority G.S. 143-215.94H; 150B-21.6;
8 Eff. XXXX 1, 2017.

1 15A NCAC 02O .0312 is proposed for adoption as follows:

2

3 **15A NCAC 02O .0312 LOCAL GOVERNMENT FUND**

4 The regulations governing "Local Government Fund" set forth in 40 CFR 280.107 are hereby incorporated by reference.

5

6 *History Note: Authority G.S. 143-215.94H; 150B-21.6;*
7 *Eff. XXXX 1, 2017.*

1 15A NCAC 02O .0314 is proposed for amendment as follows:

2

3 **15A NCAC 02O ~~.0310~~ .0314 CANCELLATION OR NONRENEWABLE BY A PROVIDER OF**
4 **ASSURANCE**

5 The ~~provisions for~~ regulations governing "Cancellation or Non-renewal by a Provider of Financial Assurance "
6 ~~contained set forth~~ in 40 CFR ~~280.105~~ 280.109 are hereby incorporated by reference ~~including any subsequent~~
7 ~~amendments and editions. Locations where this material is available are specified in Rule .0102 of this Subchapter.~~

8

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

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

11 *Amended Eff. XXXX 1, 2017.*