

**REGULATORY IMPACT ANALYSIS FOR READOPTION AND AMENDMENT OF 15A NCAC
02L SECTION .0400 AND SECTION .0500**

Name of Commission: Environmental Management Commission

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Impact Summary: State government: No
Local government: No
Federal government: No
Substantial impact: No

Authority: G.S. 143-215.3(a)(1); 143B-282; SL 2015-241 Section 14.16A; SL 2015-241 Section 14.16B

Necessity: These rule changes are necessary to conform to changes made to General Statute (G.S.) 143-215.94, replace current temporary rules required by SL 2017-57 Section 13.19 as required to implement SL 2015-241 Section 14.16B, and as part of the re adoption of the 15A NCAC 02L rules as required by G.S. 150B-21.3A (Periodic Review of Existing Rules).

I. Summary

These rule changes are necessary to conform to changes made to G.S. 143-215.94, by Session Law 2015-241 that sunset the Noncommercial Leaking Underground Storage Tank Trust Fund and eliminated the Initial Abatement requirements for Noncommercial Petroleum Underground Storage Tanks in 15A NCAC 02L Section .0400.

These rules are also being readopted pursuant to G.S. 150B-21.3A, requiring a Periodic Review of Existing Rules.

The proposed changes to Section .0400 will impose a less stringent burden on regulated persons. As provided by G.S. 150B-21.3A(d)(2), the agency is not required to prepare a fiscal note for amendments proposed for re adoption that reduce the burden to the regulated community. The proposed changes to Section .0400 are anticipated to result in an overall cost savings to regulated persons due to the reduction of regulatory burden.

II. Introduction and Purpose of Rule Change(s)

It is the responsibility of the Division of Waste Management (Division) Underground Storage Tank Section (Section) to regulate how petroleum releases from underground storage tank (UST) sources, aboveground storage tank (AST) sources, and other aboveground sources are managed within the state under the statutory authority of G.S. Chapter 143B-282. State rules governing risk-based assessment of petroleum releases from UST sources are found in Title 15A, Subchapter 02L, Section .0400 of the North Carolina Administrative Code. State rules governing risk-based assessment of petroleum releases from

aboveground sources are found in Title 15A, Subchapter 02L, Section .0500 of the North Carolina Administrative Code.

NC Session Law (SL) 2015-241 Section 14.16B required the amendment of rules that directed the owner or operator of a noncommercial underground storage tank (UST) to immediately respond to any release by trying to recover all accessible contamination. The Session Law directs the Department of Environmental Quality (Department) to classify the risk posed by a noncommercial UST discharge prior before the UST owner or operator is required to perform any cleanup actions. NC SL 2017-57 Section 13.19.(a) required the adoption of temporary rules to define the Department's application of the requirements from SL 2015-241 until such time as permanent rulemaking is completed.

Rules .0401 - .0402, .0410 - .0415, .0501, .0503 - .0515 are proposed for readoption without substantive changes.

The proposed substantive changes to Rules .0403 - .0409 are necessary to conform to changes made to G.S. 143-215.94, and replace existing temporary rules required by SL 2017-57 Section 13.19 to implement SL 2015-241 Section 14.16B.

The proposed substantive changes to Rule .0502 are necessary to correct the erroneous use of the word "underground" in the definition of "Aboveground storage tank" and will not result in an extra cost to the State, local government, or to regulated persons.

III. Baseline Analysis

Currently, temporary rules are in effect for 15A NCAC 02L Section .0400, Rules .0403 - .0409 as required by SL 2017-57 Section 13.19 to implement SL 2015-241 Section 14.16B to temporarily conform to changes made to G.S. 143-215.94.

SL 2017 Section 13.19.(a) required the Environmental Management Commission to adopt temporary rules, no later than October 1, 2017, implementing Section 14.16B of SL 2015-241, which sunset the Noncommercial Leaking Underground Storage Tank Trust Fund and eliminated the Initial Abatement requirements for Noncommercial Petroleum Underground Storage Tanks in 15A NCAC 02L Section .0400. SL 2015-241 Section 14.16B required the temporary rules to be substantively identical to the provisions of the session law.

SL 2017 Section 13.19.(a) also stipulated that the subject temporary rules would be exempt from the temporary rule expiration date requirements provided in G.S. 150B-21.1(d). Furthermore, SL 2017 Section 13.19.(a) specifically states that the subject temporary rules will remain in effect until permanent rules are adopted to replace the temporary rules. Therefore, the temporary rules in 15A NCAC 02L Section .0400, effective on September 29, 2017, are part of the baseline for this analysis. If these rules are not readopted with the proposed amendments to Rules .0403 - .0409, there will be no observable financial impact to the regulated community or to Federal, State, or local government because the temporary rules will remain in effect in perpetuity until permanent rules are adopted to replace them.

IV. Costs and Benefits

Prior to March 1, 2016, 15A NCAC 02L Section .0500 “Risk-Based Assessment and Corrective Action for Petroleum Releases From Aboveground Storage Tanks and Sources” did not exist. During the rulemaking process for Section .0500, the original proposed rule language was derived from 15A NCAC 02L Section .0400 “Risk-Based Assessment and Corrective Action for Petroleum Underground Storage Tanks” as much as possible, but changes were made in Section .0500 to accommodate the recommendations by staff council to the Rules Review Commission (RRC) to eliminate any ambiguous language and discretionary conditions. The proposed amendments to Section .0400 beyond the baseline of this analysis, generally seek to establish consistency in rule language, where appropriate, between Sections .0400 and .0500. These changes are considered to be useful clarifications for the regulated community without adding any additional requirements not already stipulated in statute and therefore do not result in any quantifiable additional costs or savings to Federal, State, or local government, or to the regulated community.

The proposed technical changes in 02L .0407(b) and (c) were made to match the non-UST language in 02L .0507. The language was originally added to 02L .0507 during the initial rulemaking based on a staff council to RRC comment suggesting that the rule should clarify when natural attenuation would be considered by the Department to be appropriate within the scope of 'maximum extent possible' and thereby replacing the previous ambiguous discretionary condition. This clarifies in rule what has traditionally been the approach by the Department and will not result in a new cost or savings to Federal, State, or local government, or to the regulated community.

The proposed technical changes in 02L .0407(d) were made to match the non-UST language in 02L .0507. The corresponding language in 02L .0507 was added during initial rulemaking to help clarify that the statutory requirements for land use restrictions, which are outside OPHSCA (Chpt 143, Art 21A Part 2A for USTs, or Part 7 for non-UST petroleum) being instead under G.S. 143B-279.9, do still apply as part of the closure requirements under the conditions stipulated in those statutes. It was considered to be a useful clarification for the regulated community without adding any additional requirements not already stipulated in statute and will not result in a new cost or savings to Federal, State, or local government, or to the regulated community.

The proposed technical changes in 02L .0408 reduce the regulatory burden on Noncommercial USTs as intended within SL 2015-241. Commercial UST sites must report this information based on abatement and assessment actions before the incident is 'closed' with a 'No Further Action' (NFA) designation, even if it is low risk. SL 2015-241 required the Department to issue a NFA designation for any Noncommercial UST site determined to be a “Low” risk prior to any abatement or assessment. Therefore, nothing would be reportable in that case. For a Noncommercial UST site, the responsible party only has to notify the Department of an apparent release, and the Department must evaluate the risk before any regulatory obligation is imposed on the owner unless there is an immediate emergency hazard. If the site poses a “High” risk, the responsible party may then be required to abate that risk either by removing contamination, or by removing the source of the risk and provide a report that either documents the change to the risk factors, or shows they met the soil cleanup requirements described in this rule. Otherwise, if the site is “Low” risk, the responsible party may receive the NFA notice from the Department.

The proposed technical changes in 2L .0409(a) and (b) were made to match the non-UST language in 02L .0509 where specific timelines were added at the request of the staff council to the RRC to reduce ambiguity for the regulated community. The 60-day timelines were extended due to the 30-day timelines, with that window being formally set in the subsequent clause under (a), where it was used to match the time allowed in (b) (i.e., to allow the owner time to receive responses to the initial notice and then

formally respond to the Department, or for notice recipients to contact the Department directly with objections.) Since clarifications were required in part by the RRC already, a slight scheduling extension was added with the intent to reduce the burden on the regulated community present in the initial tight (and ambiguous) windows, reduce the burden on the general public by providing additional time to voice objections following notification, and would reduce the burden on the Department's processes through the aforementioned benefits to the other interested parties. These proposed changes are not expected to create any additional cost or savings to Federal, State, or local government, or to the regulated community.

The proposed changes to rules in 02L Section .0500 are not anticipated to result in an overall cost or benefit increase to the State, local government, or to regulated persons as these rule changes are clarificatory or grammatical in nature.

Appendix A: Rule-Making Schedule

Action / Responsibility	Date
Approval of Rule Text to go to EMC / GWWMC	September 12, 2018
Approval of Rule and RIA for public comment / EMC	November 8, 2018
Public Comment Period	Dec. 17, 2018 – Feb. 15, 2019
Approve Hearing Officer’s Report, RIA, Adopt Rules / EMC	March 14, 2019
Approval of Rule / RRC	April 18, 2019
Proposed effective date	May 1, 2019

Appendix B: SL 2017-57 Section 13.19

Fund, the Marine Fisheries Commission Division of Marine Fisheries shall consult with the Wildlife, Resources Commission about these proposals.funding requests.

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DMF ARTIFICIAL REEFS PROGRAM FUNDING CLARIFICATION

SECTION 13.16. G.S. 113-175.1 is amended by adding a new subsection to read:

"@ To enhance fishing opportunities, the Marine Resources Fund may be used to construct artificial reefs in the estuarine and ocean waters of the State and federal waters up to 20 nautical miles from land."

UST PROGRAM RULE MAKING AND REPORT

SECTION 13.19.(a) The Environmental Management Commission shall adopt temporary rules implementing Section 14.16B of S.L. 2015-241 no later than October 1, 2017. Notwithstanding G.S. 150B-21.1(d), the temporary rules shall remain in effect until the effective date of the permanent rule adopted to replace the temporary rule.

SECTION 13.19.(b) The Commission shall report regarding the status of the rule making required by this section and by Section 14.16B of S.L. 2015-241 to the chairs of the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources and the Fiscal Research Division no later than December 31, 2017.

MERCURY SWITCH PROGRAM EXTENSION

SECTION 13.21.(a) Section 9 of S.L. 2007-142, as amended by Section 14.1(a) of S.L. 2016-94, reads as rewritten:

"**SECTION 9.** Sections 1, 2, 6, 7, and 9 of this act become effective when this act becomes law. Sections 3, 4, and 8 of this act become effective 1 July 2007. Section 5 of this act becomes effective 1 July 2007 and applies to violations that occur on or after that date. The Department shall submit the first annual report required by G.S. 130A-310.57, as enacted by Section 7 of this act, on or before 1 October 2008. Effective June 30, ~~2021~~, Part 6 of Article 9 of Chapter 130A of the General Statutes, as amended by this act, is repealed."

SECTION 13.21.(b) Section 14.1(c) of S.L. 2016-94 reads as rewritten:

"**SECTION 14.1.(c)** Subsection (b) of this section becomes effective June 30, ~~WI+.~~2021. Funds remaining in the Mercury Pollution Prevention Fund (Fund Code 24300-2119) on that date shall be transferred to the Division of Waste Management (Fund Code 14300-1760)."

SECTION 13.21.(c) This section becomes effective June 30, 2017.

WATER AND SEWER INFRASTRUCTURE GRANTS

SECTION 13.22.(a) The following allocations are made from nonrecurring funds appropriated by this act to the Division of Water Infrastructure of the Department of Environmental Quality for water and sewer infrastructure grants:

- (1) The sum of three million dollars (\$3,000,000) for the 2017-2018 fiscal year and the sum of two million dollars (\$2,000,000) for the 2018-2019 fiscal year to the Johnston County Research and Training Zone Association, Inc. for a regional wastewater project.
- (2) The sum of one million dollars (\$1,000,000) for the 2017-2018 fiscal year for grants to grantees located in development tier one or tier two areas, as defined in G.S. 143B-437.08, for any of the following:
 - a. Construction, protection, or expansion of water intake structures located in surface water impoundments. For purposes of this subdivision, protection of water intake structures may include the stabilization or restoration of natural stream functions upstream and downstream of the water intake.

Appendix C: SL 2015-241 Section 14.16

~~Part, the Secretary may transfer funds which would otherwise revert to the General Fund to the Noncommercial Fund in order to meet such claims and obligations.~~

(e) If at any time ~~either~~ the fund balance is insufficient to pay all valid claims against it, the claims shall be paid in full in the order in which they are finally determined. The Secretary may retain not more than five hundred thousand dollars (\$500,000) in the ~~Noncommercial~~ Commercial Fund as a contingency reserve and not apply the reserve to the claims. The Department may use the contingency reserve to conduct cleanups in accordance with G.S. 143-215.94G when an imminent hazard poses a threat to human health or to significant natural resources."

SECTION 14.16A.(h) G.S. 143-215.94M reads as rewritten:

"§ 143-215.94M. Reports.

(a) The Secretary shall present an annual report to the Environmental Review Commission, the Fiscal Research Division, the Senate Appropriations Subcommittee on Natural and Economic Resources, and the House Appropriations Subcommittee on Natural and Economic Resources which shall include at least the following:

- (1) A list of all discharges or releases of petroleum from underground storage tanks.
- (2) ~~A list of all cleanups requiring State funding through the Noncommercial Fund and a comprehensive budget to complete such cleanups.~~
- (3) A list of all cleanups undertaken by tank owners or operators and the status of these cleanups.
- (4) A statement of receipts and disbursements for ~~both the Commercial Fund and the Noncommercial Fund.~~
- (5) A statement of all claims against ~~both the Commercial Fund and the Noncommercial Fund~~, including claims paid, claims denied, pending claims, anticipated claims, and any other obligations.
- (6) The adequacy of ~~both the Commercial Fund and the Noncommercial Fund~~ to carry out the purposes of this Part together with any recommendations as to measures that may be necessary to assure the continued solvency of the ~~Commercial Fund and the Noncommercial Fund.~~
- (7) Repealed by Session Laws 2012-200, s. 23, effective August 1, 2012.

(b) The report required by this section shall be made by the Secretary on or before November 1 of each year."

SECTION 14.16A.(i) Subsections (d) through (h) of this section become effective December 31, 2016. The balance remaining in the Noncommercial Leaking Petroleum Underground Storage Tank Cleanup Fund and any outstanding requests for payment or reimbursement that have been deemed eligible by the Department prior to that date are transferred to the Commercial Leaking Petroleum Underground Storage Tank Cleanup Fund. The Revisor of Statutes may conform names and titles changed by this section, and may correct statutory references as required by this section, throughout the General Statutes. In making the changes authorized by this section, the Revisor may also adjust subject and verb agreement and the placement of conjunctions. The Revisor is also authorized to change references to both the Commercial Leaking Petroleum Underground Storage Tank Cleanup Fund and the NonCommercial Leaking Petroleum Underground Storage Tank Cleanup Fund to refer only to the Commercial Leaking Petroleum Underground Storage Tank Cleanup Fund.

NONCOMMERCIAL TANKS – ELIMINATE INITIAL ABATEMENT REQUIREMENTS

SECTION 14.16B.(a) Rules. – 15A NCAC 02L .0403 (Rule Application), 15A NCAC 02L .0407 (Reclassification of Risk Levels), and Section .0400 of 15A NCAC 02L (Risk-Based Assessment and Corrective Action for Petroleum Underground Storage Tanks). – Until the effective date of the revised permanent rules that the Department of Environment and Natural Resources is required to adopt pursuant to subsection (c) of this section, the Department shall implement 15A NCAC 02L .0403 (Rule Application), 15A NCAC 02L .0407 (Reclassification of Risk Levels), and Section .0400 of 15A NCAC 02L (Risk-Based Assessment and Corrective Action for Petroleum Underground Storage Tanks) as provided in subsections (b) and (c) of this section.

SECTION 14.16B.(b) Implementation. – Notwithstanding 15A NCAC 02L .0403 (Rule Application), subsection (d) of 15A NCAC 02L .0407 (Reclassification of Risk Levels),

and any other provision of Section .0400 of 15A NCAC 02L (Risk-Based Assessment and Corrective Action for Petroleum Underground Storage Tanks), the Department shall:

- (1) Not require a responsible party to take immediate action or initial abatement actions with respect to a discharge or release from a noncommercial underground storage tank until such time as the Department has classified the risk posed by the discharge or release, except for those actions determined by the Department to be necessary to protect public health, safety, and welfare and the environment, and to mitigate any fire, explosion, or vapor hazard.
- (2) Notify the responsible party that no cleanup, no further cleanup, or no further action will be required by the Department if the risk posed by a discharge or release from a noncommercial underground storage tank is determined by the Department to be low risk, without requiring soil remediation pursuant to 15A NCAC 02L .0408. The Department may, however, reclassify the risk if it later determines that the discharge or release poses an unacceptable risk or a potentially unacceptable risk to human health or the environment.

SECTION 14.16B.(c) Additional Rule-Making Authority. – The Department of Environment and Natural Resources shall adopt rules to amend 15A NCAC 02L .0403 (Rule Application), subsection (d) of 15A NCAC 02L .0407 (Reclassification of Risk Levels), and any other provision of Section .0400 of 15A NCAC 02L (Risk-Based Assessment and Corrective Action for Petroleum Underground Storage Tanks), consistent with subsection (b) of this section. Notwithstanding G.S. 150B-19(4), the rule adopted by the Department pursuant to this section shall be substantively identical to the provisions of subsection (b) of this section. Rules adopted pursuant to this section are not subject to Part 3 of Article 2A of Chapter 150B of the General Statutes. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 14.16B.(d) Effective Date. – Subsection (b) of this section expires on the date that rules adopted pursuant to subsection (c) of this section become effective.

WATER AND WASTEWATER INFRASTRUCTURE GRANTS

SECTION 14.17. Of the funds appropriated in this act to the Department of Environment and Natural Resources for State water and wastewater grants, the sum of five million dollars (\$5,000,000) for the 2015-2016 fiscal year shall be used to provide a grant to a municipality located in a development tier two county where the municipality (i) has a population less than 12,000 and (ii) has previously received a loan during the 2013 calendar year under the Drinking Water State Revolving Fund to replace water distribution lines serving 5,000 or fewer customers that have exceeded their useful life as evidenced by tuberculation, breaks, and leaks. These funds supplement funding in the base budget for water and wastewater infrastructure grants.

MILITARY BUFFERS

SECTION 14.18.(a) The funds appropriated in this act to the Clean Water Management Trust Fund for the purpose of military buffers shall only be expended on land that buffers a military facility from incompatible use encroachment.

SECTION 14.18.(b) For purposes of this section, "military facility" means a major military installation or training area identified in the report prepared by the Office of Land & Water Stewardship entitled "North Carolina Military Installation, Training Area, and Mission Protection Land Use Framework: Phase I" (December 2014 version).

ENVIRONMENTAL ASSESSMENT METHODOLOGY

SECTION 14.19. The Department of Environment and Natural Resources shall review and revise its procedures and rate tables for reimbursement of soil assessment activities. These revisions shall permit the use of Ultra Violet Fluorescence (UVF) and other appropriate test methods as alternatives to US EPA Method 8015 for soil assessment and petroleum contamination delineation activities, where the alternative would (i) not violate federal law or regulations, (ii) provide equivalent accuracy and quality of results, and (iii) result in appreciable cost savings. Nothing in this section is intended to forbid the use of US EPA

Appendix D: Proposed Amendments

The proposed rule changes are as follows:

15A NCAC 02L .0401 PURPOSE AND SCOPE

- (a) The purpose of this Section is to establish procedures for risk-based assessment and corrective action sufficient to:
- (1) protect human health and the environment;
 - (2) abate and control contamination of the waters of the State as deemed necessary to protect human health and the environment;
 - (3) permit management of the State's groundwaters to protect their designated current usage and potential future uses;
 - (4) provide for anticipated future uses of the State's groundwater;
 - (5) recognize the diversity of contaminants, the State's geology and the characteristics of each individual site; and
 - (6) accomplish these goals in a cost-efficient manner to assure the best use of the limited resources available to address groundwater pollution within the State.
- (b) The applicable portions of Section .0100 not specifically excluded apply to this Section of this Subchapter shall apply to this Section unless specifically excluded.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(a); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0402 DEFINITIONS

The definitions as set out in ~~15A NCAC 02L Rule .0102~~ Rule .0102 of this Subchapter shall apply to this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0403 RULE APPLICATION

This Section ~~applies~~ shall apply to any discharge or release from a "commercial underground storage tank" or a "noncommercial underground storage tank," as those terms are defined in G.S. 143-215.94A, ~~which~~ that is reported on or after the effective date of this Section. ~~This Section shall apply to any discharge or release from a "commercial underground storage tank" or a "noncommercial underground storage tank," as those terms are defined in G.S. 143-215.94A which is reported before the effective date of this Section as provided in 15A NCAC 02L .0416 of this Section.~~ The requirements of this Section shall apply to the owner and operator of the underground storage tank from which the discharge or release occurred, a landowner seeking reimbursement from the Commercial Leaking Underground Storage Tank Fund or the Noncommercial Leaking Underground Storage Tank Fund under G.S. 143-215.94E, and any other person responsible for the assessment or cleanup of a discharge or release from an underground storage tank, including any person who has conducted or controlled an activity ~~which~~ that results in the discharge or

release of petroleum or petroleum products as defined in G.S. 143-215.94A(10) to the groundwaters of the ~~State, State~~ or in proximity thereto; these persons shall be collectively referred to for purposes of this Section as the "responsible party." This Section shall be applied in a manner consistent with the rules found in ~~15A NCAC Subchapter 2N~~ in order to assure that the State's requirements regarding assessment and cleanup from underground storage tanks are no less stringent than Federal requirements.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(b);
 Amended Eff. December 1, ~~2005-2005~~;
 Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0404 REQUIRED INITIAL ABATEMENT ACTIONS BY RESPONSIBLE PARTY

(a) A responsible party for a commercial underground storage tank shall:

- (1) take ~~immediate~~ action to prevent ~~anyall~~ further discharge or release of petroleum from the underground storage tank; identify and mitigate ~~anyall~~ fire, ~~explosion or explosion,~~ and vapor ~~hazard; hazards;~~ remove any free product; and comply with the requirements of Rules .0601 through ~~.0604 and .0604,~~ .0701 through ~~.0703 and .0703,~~ and .0705 of Subchapter ~~02N; 02N~~ of this Chapter within 24 hours of discovery;
- (2) incorporate the requirements of ~~15A NCAC 02N Rule .0704~~ of Subchapter 02N of this Chapter into the submittal required under Item (3) of this Paragraph or the limited site assessment report required under ~~15A NCAC 02L Rule .0405~~ of this Section, whichever is applicable. ~~Such~~ The submittals shall constitute compliance with the reporting requirements of ~~15A NCAC 02N .0704(b); Rule .0704(b)~~ of Subchapter 02N of this Chapter; and
- (3) submit within 90 days of the discovery of the discharge or release a soil contamination report containing information sufficient to show that remaining unsaturated soil in the side walls and at the base of the excavation does not contain contaminant levels ~~which that~~ exceed either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to ~~15A NCAC 02L Rule .0411~~ of this Section, whichever is lower. If ~~such~~ the showing is made, the discharge or release shall be classified as low risk by the ~~Department; Department~~ as defined in Rules .0406 and .0407 of this Section.

(b) A responsible party for a noncommercial underground storage tank shall:

- (1) take necessary actions to protect public health, safety, and welfare and the environment, including actions to prevent all further discharge or release of petroleum from the noncommercial underground storage tank; to identify and mitigate all fire, explosion, and vapor hazards; and to report the release within 24 hours of discovery, in compliance with G.S. 143-215.83(a), G.S. 143-215.84(a), G.S. 143-215.85(b), and G.S. 143-215.94E; and
- (2) provide or otherwise make available any information required by the Department to determine the site risk as described in Rules .0405, .0406, and .0407 of this Section.

(c) The Department shall notify the responsible party for a noncommercial underground storage tank that no cleanup, no further cleanup, or no further action shall be required without requiring additional soil remediation pursuant to Rule .0408 of this Section if the site is determined by the Department to be low risk. This classification shall be based on information provided to the Department that:

- (1) describes the source and type of the petroleum release, site-specific risk factors, and risk factors present in the surrounding area as defined in Rules .0406 and .0407 of this Section;
- (2) demonstrates that no remaining risk factors are present that are likely to be affected per G.S. 143-215.94V(b); or
- (3) documents that soils remaining onsite do not contain contaminant levels that exceed either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to Rule .0411 of this Section, whichever is lower.

The Department shall reclassify the site as high risk, as defined in Rule .0406(1) of this Section, upon receipt of new information related to site conditions indicating that the discharge or release from a noncommercial underground storage tank poses an unacceptable risk or a potentially unacceptable risk to human health or the environment, as described in Rule .0407 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(c)(1)-(3); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0405 REQUIREMENTS FOR LIMITED SITE ASSESSMENT

If the required showing for a commercial underground storage tank cannot be made or if the Department determines that a release from a noncommercial underground storage tank represents an unacceptable risk under 15A NCAC 02L Rule .0404 of this Section, the responsible party shall submit within 120 days of the discovery of the discharge or release, or within such other greater time limit approved by the Department, a report containing information needed by the Department to classify the level of risk to human health and the environment posed by a discharge or release under 15A NCAC 02L Rule .0406 of this Section. When considering a request from a responsible party for additional time to submit the report, the Department shall consider the following:

- (a) the extent to which the request for additional time is due to factors outside of the control of the responsible party;
- (b) the previous history of the person submitting the report in complying with deadlines established under the Commission's rules;
- (c) the technical complications associated with assessing the extent of contamination at the site or identifying potential receptors; and
- (d) the necessity for action to eliminate an imminent threat to public health or the environment.

Such The report shall include, at a minimum, include:

- (1) a location map, based on a USGS topographic map, showing the radius of 1500 feet from the source

area of a confirmed release or discharge and depicting all water supply ~~wells and wells~~, surface ~~waters~~waters, and designated wellhead protection areas as defined in 42 U.S.C. 300h-7(e) within the 1500-foot radius. 42 U.S.C. 300h-7(e), is incorporated by reference including subsequent amendments and editions. Copies may be obtained at no cost from the U.S. Government Bookstore's website at <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title42/html/USCODE-2010-title42-chap6A-subchapXII-partC-sec300h-7.htm>. The material is available for inspection at the Department of Environmental Quality, UST Section, 217 West Jones Street, Raleigh, NC 27603. For purposes of this Section, source area means the point of release or discharge from the underground storage tank system;

- (2) a determination of whether the source area of the discharge or release is within a designated wellhead protection area as defined in 42 U.S.C. 300h-7(e);
- (3) if the discharge or release is in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985, a determination of whether the source area of the discharge or release is located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer ~~which~~that is being used or may be used as a source of drinking water;
- (4) a determination of whether vapors from the discharge or release pose a threat of explosion due to the accumulation of vapors in a confined space or pose any other serious threat to public health, public ~~safety~~safety, or the environment;
- (5) scaled site ~~map(s)~~maps showing the location of the following ~~which~~that are on or adjacent to the property where the source is located: ~~site boundaries, roads, buildings, basements, floor and storm drains, subsurface utilities, septic tanks and leach fields, underground storage tank systems, monitoring wells, borings~~borings, and the sampling points;
 - (a) site boundaries;
 - (b) roads;
 - (c) buildings;
 - (d) basements;
 - (e) floor and storm drains;
 - (f) subsurface utilities;
 - (g) septic tanks and leach fields;
 - (h) underground and aboveground storage tank systems;
 - (i) monitoring wells;
 - (j) water supply wells;
 - (k) surface water bodies and other drainage features;
 - (l) borings; and
 - (k) the sampling points;
- (6) the results from a limited site assessment ~~which~~that shall include:
 - (a) the analytical results from soil samples collected during the construction of a monitoring

well installed in the source area of each confirmed discharge or release from a noncommercial or commercial underground storage tank and either the analytical results of a groundwater sample collected from the well or, if free product is present in the well, the amount of free product in the well. The soil samples shall be collected every five feet in the unsaturated zone unless a water table is encountered at or greater than a depth of 25 feet from land surface in which case soil samples shall be collected every 10 feet in the unsaturated zone. The soil samples shall be collected from suspected worst-case locations exhibiting visible contamination or elevated levels of volatile organic compounds in the borehole;

- (b) if any constituent in the groundwater sample from the source area monitoring well installed in accordance with Sub-item (a) of this Item, for a site meeting the high risk classification in ~~15A NCAC 02L .0406(1), Rule .0406(1) of this Section,~~ exceeds the standards or interim standards established in ~~15A NCAC 02L Rule .0202 of this Subchapter~~ by a factor of 10 and is a discharge or release from a commercial underground storage tank, the analytical results from a groundwater sample collected from each of three additional monitoring wells or, if free product is present in any of the wells, the amount of free product in such well. The three additional monitoring wells shall be installed as follows: ~~as best as can be determined,~~ one upgradient of the source of contamination and two downgradient of the source of contamination. The monitoring wells installed upgradient and downgradient of the source of contamination ~~must~~shall be located such that groundwater flow direction can be determined; and
- (c) potentiometric data from all required wells;
- (7) the availability of public water supplies and the identification of properties served by the public water supplies within 1500 feet of the source area of a confirmed discharge or release;
- (8) the land use, including zoning if applicable, within 1500 feet of the source area of a confirmed discharge or release;
- (9) a discussion of ~~site specific~~site-specific conditions or possible actions ~~which~~that could result in lowering the risk classification assigned to the release. ~~Such~~The discussion shall be based on information known or required to be obtained under this Paragraph; and
- (10) names and current addresses of all owners and operators of the underground storage tank systems for which a discharge or release is confirmed, the ~~owner(s)~~owners of the land upon which such systems are located, and all potentially affected real property owners. ~~When considering a request from a responsible party for additional time to submit the report, the Division shall consider the extent to which the request for additional time is due to factors outside of the control of the responsible party, the previous history of the person submitting the report in complying with deadlines established under the Commission's rules, the technical complications associated with assessing the extent of contamination at the site or identifying potential receptors, and the necessity for immediate action to eliminate an imminent threat to public health or the environment.~~

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(c)(4); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0406 DISCHARGE OR RELEASE CLASSIFICATIONS

The Department shall classify the risk of each known discharge or release as high, ~~intermediate~~intermediate, or low risk unless the discharge or release has been classified under ~~15A NCAC 02L .0404(3)~~Rule .0404(a)(3) or .0404(c) of this Section. For purposes of this Section:

- (1) "High risk" means that:
 - (a) a water supply well, including one used for non-drinking purposes, has been contaminated by ~~the~~a release or discharge;
 - (b) a water supply well used for drinking water is located within 1000 feet of the source area of a confirmed discharge or ~~release~~release from a commercial underground storage tank or a noncommercial underground storage tank storing motor fuel as defined by G.S. 143-215.94A(2)a., (7);
 - (c) a water supply well not used for drinking water is located within 250 feet of the source area of a confirmed discharge or ~~release~~release from a commercial underground storage tank or a noncommercial underground storage tank storing motor fuel as defined by G.S. 143-215.94A(2)a., (7);
 - (d) the groundwater within 500 feet of the source area of a confirmed discharge or release from a commercial underground storage tank or a noncommercial underground storage tank storing motor fuel as defined by G.S. 143-215.94A(2)a., (7) has the potential for future use in that there is no source of water supply other than the groundwater;
 - (e) a water supply well, including one used for non-drinking purposes, is located within 150 feet of the source area of a confirmed discharge or release from a noncommercial underground storage tank storing heating oil for consumptive use on the premises;
 - ~~(f)~~(g) the vapors from ~~the~~a discharge or release pose a serious threat of explosion due to accumulation of the vapors in a confined space; or
 - ~~(f)~~(g) the discharge or release poses an imminent danger to public health, public safety, or the environment.
- (2) "Intermediate risk" means that:
 - (a) surface water is located within 500 feet of the source area of a confirmed discharge or release from a commercial underground storage tank and the maximum groundwater contaminant concentration exceeds the applicable surface water quality standards and criteria found in ~~15A NCAC~~Rule 02B .0200 of this Chapter by a factor of 10;
 - (b) in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985, the source area of a confirmed

- discharge or release from a commercial underground storage tank is located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer ~~which~~that the Department determines is being used or may be used as a source of drinking water;
- (c) the source area of a confirmed discharge or release from a commercial underground storage tank is within a designated wellhead protection area, as defined in 42 U.S.C. 300h-7(e);
- (d) the levels of groundwater contamination associated with a confirmed discharge or release from a commercial underground storage tank for any contaminant except ethylene dibromide, ~~benzene~~benzene, and alkane and aromatic carbon fraction classes exceed 50 percent of the solubility of the contaminant at 25 degrees Celsius or 1,000 times the groundwater standard or interim standard established in ~~15A NCAC 02L .0202, Rule .0202 of this Subchapter~~, whichever is lower; or
- (e) the levels of groundwater contamination associated with a confirmed discharge or release from a commercial underground storage tank for ethylene dibromide and benzene exceed 1,000 times the federal drinking water standard set out in 40 CFR 141. 40 CFR 141 is incorporated by reference including subsequent amendments and editions. Copies may be obtained at no cost from the U.S. Government Bookstore's website at <https://www.gpo.gov/fdsys/pkg/CFR-2015-title40-vol23/pdf/CFR-2015-title40-vol23-part141.pdf>. The material is available for inspection at the Department of Environmental Quality, UST Section, 217 West Jones Street, Raleigh, NC 27603.
- (3) "Low risk" means that:
- (a) the risk posed does not fall within the ~~high or intermediate risk categories~~high risk category for any underground storage tank, or within the intermediate risk category for a commercial underground storage tank; or
- (b) based on review of site-specific information, limited ~~assessment~~assessment, or interim corrective actions, ~~the Department determines that~~ the discharge or release poses no significant risk to human health or the environment.

If the criteria for more than one risk category applies, the discharge or release shall be classified at the highest risk level identified in ~~15A NCAC 02L~~Rule .0407 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
Recodified from 15A NCAC 02L .0115(d);
Amended Eff. December 1, 2005-2005;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0407 RECLASSIFICATION OF RISK LEVELS

(a) It shall be a continuing obligation that each responsible party shall notify the Department of any changes that may affect the level of risk assigned to a discharge or release by the Department if the change is known or should be known by the responsible party, including changes in zoning of real property, use of real property, or the use of groundwater

that has been contaminated or is expected to be contaminated by the discharge or release. The Department ~~may~~ shall reclassify the risk posed by a release if warranted by further information concerning the potential exposure of receptors to the discharge or release or upon receipt of new information concerning changed conditions at the site. After initial classification of the discharge or release, the Department may require limited assessment, interim corrective action, or other actions ~~which~~ that the Department believes will result in a lower risk classification. ~~It shall be a continuing obligation of each responsible party to notify the Department of any changes that might affect the level of risk assigned to a discharge or release by the Department if the change is known or should be known by the responsible party. Such changes shall include, but shall not be limited to, changes in zoning of real property, use of real property or the use of groundwater that has been contaminated or is expected to be contaminated by the discharge or release, if such change could cause the Department to reclassify the risk.~~

(b) If the risk posed by a discharge or release is determined by the Department to be high risk, the responsible party shall comply with the assessment and cleanup requirements of Rule .0106(c), ~~(g)~~ (g), and (h) of this Subchapter and ~~15A NCAC Rule 02N .0706 and 0707.~~ 0707 of this Chapter. The goal of ~~any~~ any required corrective action for groundwater contamination shall be restoration to the level of the groundwater standards set forth in ~~15A NCAC 02L Rule .0202 of this Subchapter~~ or as closely thereto as is economically and technologically feasible. ~~feasible.~~ In ~~any~~ any corrective action plan submitted pursuant to this Paragraph, natural attenuation shall be used to the maximum extent ~~possible.~~ possible, when the benefits of its use shall not increase the risk to the environment and human health. If the responsible party demonstrates that natural attenuation prevents the further migration of the plume, the Department may approve a groundwater monitoring plan.

(c) If the risk posed by a discharge or release is determined by the Department to be an intermediate risk, the responsible party shall comply with the assessment requirements of ~~15A NCAC 02L Rule .0106(c) and (g) of this Subchapter and 15A NCAC 02N .0706.~~ Rule 02N .0706 of this Chapter. As part of the comprehensive site assessment, the responsible party shall evaluate, based on site specific conditions, whether the release poses a significant risk to human health or the environment. If the Department determines, based on the site-specific conditions, that the discharge or release does not pose a significant threat to human health or the environment, the site shall be reclassified as a low risk site. If the site is not reclassified, the responsible party shall, at the direction of the Department, submit a groundwater monitoring plan or a corrective action plan, or a combination thereof, meeting the cleanup standards of this Paragraph and containing the information required in ~~15A NCAC 02L Rule .0106(h) of this Subchapter and 15A NCAC 02N .0707.~~ Rule 02N .0707 of this Chapter. Discharges or releases ~~which~~ that are classified as intermediate risk shall be remediated, at a minimum, to a cleanup level of 50 percent of the solubility of the contaminant at 25 degrees Celsius or 1,000 times the groundwater standard or interim standard established in ~~15A NCAC 02L .0202,~~ Rule .0202 of this Subchapter, whichever is ~~lower.~~ lower, for any groundwater contaminant except ethylene dibromide, benzene and alkane and aromatic carbon fraction classes. Ethylene dibromide and benzene shall be remediated to a cleanup level of 1,000 times the federal drinking water standard ~~set out in 40 CFR 141 as referenced in Rule 18C .1518 of this Chapter incorporated by reference including subsequent amendments and editions, and available free of charge at <http://reports.oah.state.nc.us/ncac/title 15a - environmental quality/chapter 18 - environmental health/subchapter c/15a ncac 18c .1518.pdf>.~~ Additionally, if a corrective action plan or groundwater monitoring plan is required under this Paragraph, the responsible party shall demonstrate that the groundwater cleanup levels are sufficient to prevent a violation of:

- (1) the rules contained in ~~15A NCAC 02B~~; Subchapter 02B of this Chapter;
- (2) the standards contained in ~~15A NCAC 02L Rule .0202~~ of this Subsection in a deep aquifer as described in ~~15A NCAC 02L Rule .0406(2)(b)~~ of this Section; and
- (3) the standards contained in ~~15A NCAC 02L Rule .0202~~ of this Subsection at a location no closer than one year time of travel upgradient of a well within a designated wellhead protection area, based on travel time and the natural attenuation capacity of the subsurface materials or on a physical barrier to groundwater migration that exists or will be installed by the person making the request.

In any corrective action plan submitted pursuant to this Paragraph, natural attenuation shall be used to the maximum extent ~~possible~~ possible, if the benefits of its use will not increase the risk to the environment and human health.

(d) If the risk posed by a discharge or release is determined ~~by the Department~~ to be a low risk, the Department shall notify the responsible party that no cleanup, no further ~~cleanup~~ cleanup, or no further action will be required by the Department unless the Department later determines that the discharge or release poses an unacceptable risk or a potentially unacceptable risk to human health or the environment. No notification ~~will~~ shall be issued pursuant to this Paragraph, however, until the responsible party ~~has completed soil remediation pursuant to 15A NCAC 02L .0408 of this Section except as provided in 15A NCAC 02L .0416 of this Section or as closely thereto as economically or technologically feasible.~~ has:

- (1) completed soil remediation pursuant to 15A NCAC 02L Rule .0408 of this Section or as closely thereto as economically or technologically feasible;
- (2) submitted proof of public notification, if required; and
- (3) recorded all required land-use restrictions.

~~The issuance by the Department of a notification under this Paragraph shall not affect any private right of action by any party which may be affected by the contamination.~~

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(e)-(h); Amended Eff. December 1, ~~2005-2005~~; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0408 ASSESSMENT AND REMEDIATION PROCEDURES

Assessment and remediation of soil contamination shall be addressed as follows:

- (1) At the time that the Department determines the risk posed by the discharge or release, the Department shall also determine, based on site-specific information, whether the site is "residential" or "industrial/commercial." For the purposes of this Section, a site is presumed residential, but may be classified as industrial/commercial if the Department determines based on site-specific information that exposure to the soil contamination is limited in time due to the use of the site and does not involve exposure to children. For the purposes of this Paragraph, "site" means both the property upon which the discharge or release ~~has~~ occurred and any property upon which soil has been affected by the discharge or release.

- (2) ~~The~~ For a discharge or release from a commercial underground storage tank, or for a discharge or release from a noncommercial underground storage tank classified by the Department as high risk, the responsible party shall submit a report to the Department assessing the vertical and horizontal extent of soil ~~contamination~~ contamination in excess of the lower of:
- (a) the residential or industrial/commercial maximum soil contaminant concentration, whichever is applicable, that has been established by the Department pursuant to Rule .0411 of this Section; or
- (b) the "soil-to-groundwater" maximum soil contaminant concentration that has been established by the Department pursuant to Rule .0411 of this Section.
- (3) For a discharge or release from a commercial underground storage tank classified by the Department as low risk, the responsible party shall submit a report demonstrating that soil contamination has been remediated to either the residential or industrial/commercial maximum soil contaminant concentration established by the Department pursuant to ~~15A NCAC 02L~~ Rule .0411 of this Section, whichever is applicable.
- (4) For a discharge or release classified by the Department as high or intermediate risk, the responsible party shall submit a report demonstrating that soil contamination has been remediated to the lower of:
- (a) the residential or industrial/commercial maximum soil contaminant concentration, whichever is applicable, that has been established by the Department pursuant to ~~15A NCAC 02L~~ Rule .0411 of this Section; or
- (b) the "soil-to-groundwater" maximum soil contaminant concentration that has been established by the Department pursuant to ~~15A NCAC 02L~~ Rule .0411 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(i); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0409 NOTIFICATION REQUIREMENTS

(a) A responsible party who submits a corrective action plan ~~which~~ that proposes natural ~~attenuation or~~ attenuation, to cleanup groundwater contamination to a standard other than a standard or interim standard established in ~~15A NCAC 02L .0202~~ Rule .0202 of this Subchapter, or to cleanup soil other than to the standard for residential use or soil-to-groundwater contaminant concentration established pursuant to this Section, whichever is lowest, shall give notice to: ~~the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs; all property owners and occupants within or contiguous to the area containing the contamination; and all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.~~

- (1) the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs;

- (2) all property owners and occupants within or contiguous to the area containing the contamination;
and
 (3) all property owners and occupants within or contiguous to the area where the contamination is
expected to migrate.

~~Such~~The notice shall describe the nature of the plan and the reasons supporting it. Notification shall be made by certified mail concurrent with the submittal of the corrective action plan. Approval of the corrective action plan by the Department shall be postponed for a period of ~~30~~60 days following receipt of the request so that the Department may consider ~~comments submitted.~~comments. The responsible party shall, within a ~~time frame determined by the Department to be sufficient,~~30 days, provide the Department with a copy of the notice and proof of receipt of each required ~~notice,~~notice or of refusal by the addressee to accept delivery of a required notice. If notice by certified mail to occupants under this Paragraph is impractical, the responsible party ~~may~~shall give notice ~~by posting such notice prominently in a manner designed to give actual notice to the occupants as provided in G.S. 1A-1, Rule 4(j) or Rule 4(j1).~~ If notice is made to occupants by posting, the responsible party shall provide the Department with a copy of the posted notice and a description of the manner in which such posted notice was given.

(b) A responsible party who receives a notice from the Department pursuant to ~~15A NCAC 02L~~Rule .0404(c) or .0407(d) of this Section for a discharge or release ~~which~~that has not been remediated to the groundwater standards or interim standards established in Rule .0202 of this Subchapter or to the lower of the residential or soil-to-groundwater contaminant concentrations established under ~~15A NCAC 02L~~Rule .0411 of this Section, shall, within 30 days of the receipt of such notice, provide a copy of the notice to: ~~the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs; all property owners and occupants within or contiguous to the area containing contamination; and all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.~~

- (1) the local Health Director and the chief administrative officer of each political jurisdiction in which
the contamination occurs;
 (2) all property owners and occupants within or contiguous to the area containing the contamination;
and
 (3) all property owners and occupants within or contiguous to the area where the contamination is
expected to migrate.

Notification shall be made by certified mail. The responsible party shall, within a ~~time frame determined by the Department,~~60 days of receipt of the original notice from the Department, provide the Department with proof of receipt of the copy of the ~~notice,~~notice or of refusal by the addressee to accept delivery of the copy of the notice. If notice by certified mail to occupants under this Paragraph is impractical, the responsible party ~~may~~shall give notice ~~by posting such notice prominently in a manner designed to give actual notice to the occupants as provided in G.S. 1A-1, Rule 4(j) or Rule 4(j1).~~ If notice is made to occupants by posting, the responsible party shall provide the Department with a description of the manner in which ~~such~~the posted notice was given.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(j) and (k);

Amended Eff. December 1, ~~2005-2005~~;

Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0410 DEPARTMENTAL LISTING OF DISCHARGES OR RELEASES

~~To the extent feasible, the~~The Department shall maintain in each of the Department's regional offices a list of all petroleum underground storage tank discharges or releases discovered and reported to the Department within the region on or after the effective date of this Section and all petroleum underground storage tank discharges or releases for which notification was issued under ~~15A NCAC 02L~~Rule .0407(d) of this Section by the Department on or after the effective date of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;

Recodified from 15A NCAC 02L .0115(l);

Amended Eff. December 1, ~~2005-2005~~;

Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0411 ESTABLISHING MAXIMUM SOIL CONTAMINATION CONCENTRATIONS

The Department shall ~~publish,~~publish and annually ~~revise,~~revise maximum soil contaminant concentrations to be used as soil cleanup levels for contamination from petroleum underground storage tank systems. The Department shall establish maximum soil contaminant concentrations for residential, industrial/commercial and soil-to-groundwater exposures as follows:

- (1) The following equations and references shall be used in establishing residential maximum soil contaminant concentrations. Equation 1 shall be used for each contaminant with an EPA carcinogenic classification of A, B1, B2, C, D or E. Equation 2 shall be used for each contaminant with an EPA carcinogenic classification of A, B1, B2 or C. The maximum soil contaminant concentration shall be the lower of the concentrations derived from Equations 1 and 2.
 - (a) Equation 1: Non-cancer Risk-based Residential Ingestion Concentration

$$\text{Soil mg/kg} = [0.2 \times \text{oral chronic reference dose} \times \text{body weight, age 1 to 6} \times \text{averaging time noncarcinogens}] / [\text{exposure frequency} \times \text{exposure duration, age 1 to 6} \times (\text{soil ingestion rate, age 1 to 6} / 10^6 \text{ mg/kg})].$$
 - (b) Equation 2: Cancer Risk-based Residential Ingestion Concentration

$$\text{Soil mg/kg} = [\text{target cancer risk of } 10^{-6} \times \text{averaging time carcinogens}] / [\text{exposure frequency} \times (\text{soil ingestion factor, age adjusted} / 10^6 \text{ mg/kg}) \times \text{oral cancer slope factor}].$$

The age adjusted soil ingestion factor shall be calculated by: $[(\text{exposure duration, age 1 to 6} \times \text{soil ingestion rate, age 1 to 6}) / (\text{body weight, age 1 to 6})] + [((\text{exposure duration, total} - \text{exposure duration, age 1 to 6}) \times \text{soil ingestion, adult}) / (\text{body weight, adult})].$
 - (c) The exposure factors selected in calculating the residential maximum soil contaminant concentrations shall be within the recommended ranges specified in the following references or the most recent version of these references:
 - (i) EPA, ~~1990-2011~~. Exposure Factors Handbook;

- (ii) EPA, 1991. Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part B, Development of Risk Based Preliminary Remediation Goals);
 - (iii) ~~EPA Region III. Risk-based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>; EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>; and~~
 - (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment, 2018. Region 4 Human Health Risk Assessment Supplemental Guidance, including future amendments.~~
- (d) The following references or the most recent version of these references, in order of preference, shall be used to obtain oral chronic reference doses and oral cancer slope factors:
- (i) EPA. Integrated Risk Information System (IRIS) Computer Database;
 - (ii) EPA. Health Effects Assessment Summary Tables (HEAST);
 - (iii) ~~EPA Region III. Risk-based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>; EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>;~~
 - (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment, 2018. Region 4 Human Health Risk Assessment Supplemental Guidance, including future amendments; and~~
 - (v) Other appropriate, published health risk assessment data, and scientifically valid peer-reviewed published toxicological data.
- (2) The following equations and references shall be used in establishing industrial/commercial maximum soil contaminant concentrations. Equation 1 shall be used for each contaminant with an EPA carcinogenic classification of A, B1, B2, C, D or E. Equation 2 shall be used for each contaminant with an EPA carcinogenic classification of A, B1, B2 or C. The maximum soil contaminant concentration shall be the lower of the concentrations derived from Equations 1 and 2.
- (a) Equation 1: Non-cancer Risk-based Industrial/Commercial Ingestion Concentration

$$\text{Soil mg/kg} = [0.2 \times \text{oral chronic reference dose} \times \text{body weight, adult} \times \text{averaging time noncarcinogens}] / [\text{exposure frequency} \times \text{exposure duration, adult} \times (\text{soil ingestion rate, adult} / 10^6 \text{ mg/kg}) \times \text{fraction of contaminated soil ingested}].$$
 - (b) Equation 2: Cancer Risk-based Industrial/Commercial Ingestion Concentration

$$\text{Soil mg/kg} = [\text{target cancer risk of } 10^{-6} \times \text{body weight, adult} \times \text{averaging time carcinogens}] / [\text{exposure frequency} \times \text{exposure duration, adult} \times (\text{soil ingestion rate, adult} / 10^6 \text{ mg/kg}) \times \text{fraction of contaminated soil ingested} \times \text{oral cancer slope factor}].$$

- (c) The exposure factors selected in calculating the industrial/commercial maximum soil contaminant concentrations shall be within the recommended ranges specified in the following references or the most recent version of these references:
- (i) EPA, ~~1990~~,2011. Exposure Factors Handbook;
 - (ii) EPA, 1991. Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part B, Development of Risk Based Preliminary Remediation Goals);
 - (iii) ~~EPA Region III. Risk-based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>;~~EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>; and
 - (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment,~~2018. Region 4 Human Health Risk Assessment Supplemental Guidance, including future amendments.
- (d) The following references or the most recent version of these references, in order of preference, shall be used to obtain oral chronic reference doses and oral cancer slope factors:
- (i) EPA. Integrated Risk Information System (IRIS) Computer Database;
 - (ii) EPA. Health Effects Assessment Summary Tables (HEAST);
 - (iii) ~~EPA Region III. Risk-based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>;~~EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>;
 - (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment,~~2018. Region 4 Human Health Risk Assessment Supplemental Guidance, including future amendments; and
 - (v) Other appropriate, published health risk assessment data, and scientifically valid peer-reviewed published toxicological data.
- (3) The following equations and references shall be used in establishing the soil-to-groundwater maximum contaminant concentrations:
- (a) Organic Constituents:

$$\text{Soil mg/kg} = \text{groundwater standard or interim standard} \times [(.02 \times \text{soil organic carbon-water partition coefficient}) + 4 + (1.733 \times 41 \times \text{Henry's Law Constant (atm.-m}^3/\text{mole)})]$$
 - (i) If no groundwater standard or interim standard has been established under Rule .0202 of this Subchapter, the practical quantitation limit shall be used in lieu of a standard to calculate the soil-to-groundwater maximum contaminant concentrations.

(ii) The following references or the most recent version of these references, in order of preference, shall be used to obtain soil organic carbon-water partition coefficients and Henry's Law Constants:

- (A) ~~EPA, 1996. Soil Screening Guidance: Technical Background Document (EPA/540/R95/128);~~ EPA. Superfund Chemical Data Matrix (SCDM), available at <https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm>. SCDM is referenced as an original source for the EPA, 1996, Soil Screening Guidance: Technical Background Document. (EPA/540/R95/128) and the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (EPA, OSWER 9355.4-24), and users are instructed in Appendix C of the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, to obtain the most recent values from the referenced sources;
- (B) EPA, 1986. Superfund Public Health Evaluation Manual. Office of Emergency and Remedial Response (EPA/540/1-86/060); 1991. Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual; it is Volume I of the two-volume set called Risk Assessment Guidance for Superfund available at <https://www.epa.gov/risk/risk-assessment-guidance-superfund-rags-part>;
- (C) Agency for Toxic Substances and Disease Registry, "Toxicological Profile for [individual chemical]." U.S. Public Health Service;
- (D) Montgomery, J.H., 1996-2007. Groundwater Chemicals Desk Reference. CRC Press, Inc; and
- ~~(E) Sims, R.C., J.L. Sims and S.G. Hansen, 1991. Soil Transport and Fate Database, Version 2.0. EPA Robert S. Kerr Environmental Laboratory; and~~
- ~~(F)~~(E) Other appropriate, published, peer-reviewed and scientifically valid data.

(b) Inorganic Constituents:

Soil mg/kg = groundwater standard or interim standard x [(20 x soil-water partition coefficient for pH of 5.5) + 4 + (1.733 x 41 x Henry's Law Constant (atm.-m³/mole))].

- (i) If no groundwater standard or interim standard has been established under Rule .0202 of this Subchapter, the practical quantitation limit shall be used in lieu of a standard to calculate the soil-to-groundwater maximum contaminant concentrations.
- (ii) The following references or the most recent version of these references, in order of preference, shall be used to obtain soil-water partition coefficients and Henry's Law Constants:

- (A) ~~EPA, 1996. Soil Screening Guidance: Technical Background Document (EPA/540/R95/128);~~ EPA. Superfund Chemical Data Matrix (SCDM), available at <https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm>. SCDM is referenced as an original source for the EPA, 1996, Soil

Screening Guidance: Technical Background Document (EPA/540/R95/128) and the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (EPA, OSWER 9355.4-24), and users are instructed in Appendix C of the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, to obtain the most recent values from the referenced sources;

- (B) Baes, C.F., III, R.D. Sharp, A.L. Sjoreen, and R.W. Shor, 1984. A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides Through Agriculture. Oak Ridge National Laboratory;
- (C) Agency for Toxic Substances and Disease Registry, "Toxicological Profile for [individual chemical]." U.S. Public Health Service; and
- ~~(D)~~ ~~Sims, R.C., J.L. Sims and S.G. Hansen, 1991. Soil Transport and Fate Database, Version 2.0. EPA Robert S. Kerr Environmental Laboratory; and~~
- ~~(E)~~(D) Other appropriate, published, peer-reviewed and scientifically valid data.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(m); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0412 ANALYTICAL PROCEDURES FOR SOIL SAMPLES

(a) Analytical procedures for soil samples required under this Section, ~~except as provided in 15A NCAC 02L .0417 of this Section,~~ shall be methods accepted by the US EPA as suitable for determining the presence and concentration of petroleum hydrocarbons for the type of petroleum released.

(b) A sufficient number of soil samples collected, including the most contaminated sample, shall be analyzed as follows in order to determine the risks of the constituents of contamination:

- (1) soil samples collected from a discharge or release of low boiling point fuels, ~~including, but not limited to, including~~ gasoline, aviation ~~gasoline~~gasoline, and gasohol, shall be analyzed for volatile organic compounds and ~~additives~~additives, ~~including isopropyl ether and methyl tertiary butyl ether,~~ using EPA Method ~~8260, including isopropyl ether and methyl tertiary butyl ether;~~8260;
- (2) soil samples collected from a discharge or release of high boiling point fuels, ~~including, but not limited to, including~~ kerosene, diesel, varsol, mineral spirits, naphtha, jet ~~fuels~~fuels, and fuel oil no. 2, shall be analyzed for volatile organic compounds using EPA Method 8260 and semivolatile organic compounds using EPA Method 8270;
- (3) soil samples collected from a discharge or release of heavy fuels shall be analyzed for semivolatile organic compounds using EPA Method 8270;

- (4) soil samples collected from a discharge or release of used and waste oil shall be analyzed for volatile organic compounds using EPA Method 8260, semivolatile organic compounds using EPA Method 8270, polychlorinated biphenyls using EPA Method 8080, and chromium and ~~lead, lead~~ using procedures specified in Subparagraph (6) of this Paragraph;
- (5) soil samples collected from ~~any~~ discharge or release subject to this Section shall be analyzed for alkane and aromatic carbon fraction classes using methods approved by the Director under Rule 2H .0805(a)(1) of this Chapter;
- (6) analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph shall be performed as specified in the following references or the most recent version of these references: Test Methods for Evaluating Solid Wastes:Physical/Chemical Methods, November 1990, U.S. Environmental Protection Agency publication number SW-846; or in accordance with other methods or procedures approved by the Director under ~~15A NCAC 2H.0805(a)(1);~~ Rule 2H .0805(a)(1) of this Chapter;
- (7) other EPA-approved analytical methods may be used if the methods include the same constituents as the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph and meet the detection limits of the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph; and
- (8) metals and acid extractable organic compounds shall be eliminated from analyses of soil samples collected pursuant to this Section if these compounds are not detected in soil samples collected during the construction of the source area monitoring well required under ~~15A NCAC 02L~~ Rule .0405 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(n);
 Amended Eff. December 1, 2005-2005;
 Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0413 ANALYTICAL PROCEDURES FOR GROUNDWATER SAMPLES

- (a) Analytical procedures for groundwater samples required under this Section shall be methods accepted by the US EPA as suitable for determining the presence and concentration of petroleum hydrocarbons for the type of petroleum released.
- (b) A sufficient number of groundwater samples, including the most contaminated sample, shall be analyzed as follows in order to determine the risks of the constituents of contamination:
 - (1) groundwater samples collected from a discharge or release of low boiling point fuels, ~~including, but not limited to, including~~ gasoline, aviation ~~gasoline~~ gasoline, and gasohol, shall be analyzed for volatile organic ~~compounds~~ compounds, including xylenes, isopropyl ether, and methyl tertiary butyl ether, using Standard Method ~~6210D~~ 6200B or EPA Methods 601 and ~~602, including xylenes, isopropyl ether and methyl tertiary butyl ether.~~ 602. Samples shall also be analyzed for ethylene dibromide using EPA Method 504.1 and lead using Standard Method 3030C preparation. 3030C metals preparation, using a 0.45 micron filter, ~~must~~ shall be completed within 72 hours of sample collection;

- (2) groundwater samples collected from a discharge or release of high boiling point fuels, ~~including, but not limited to, including~~ kerosene, diesel, varsol, mineral spirits, naphtha, jet ~~fuels~~fuels, and fuel oil no. 2, shall be analyzed for volatile organic compounds using EPA Method 602 and semivolatile organic compounds plus the 10 largest non-target peaks identified using EPA Method 625;
- (3) groundwater samples collected from a discharge or release of heavy fuels shall be analyzed for semivolatile organic compounds plus the 10 largest non-target peaks identified using EPA Method 625;
- (4) groundwater samples collected from a discharge or release of used or waste oil shall be analyzed for volatile organic compounds using Standard Method ~~6210D, 6200B~~, semivolatile organic compounds plus the 10 largest non-target peaks identified using EPA Method 625, and chromium and lead using Standard Method 3030C preparation. 3030C metals preparation, using a 0.45 micron filter, ~~must~~shall be completed within 72 hours of sample collection;
- (5) groundwater samples collected from ~~any~~ discharge or release subject to this Section shall be analyzed for alkane and aromatic carbon fraction classes using methods approved by the Director under Rule 2H .0805(a)(1) of this Chapter;
- (6) analytical methods specified in Subparagraphs (1), (2), (3) and (4) of this Paragraph shall be performed as specified in the following references or the most recent version of these references: Test Procedures for the Analysis of Pollutants under the Clean Water Act, Federal Register Vol. 49 No. 209, 40 CFR Part 136, October 26, 1984; Standard Methods for the Examination of Water and Wastewater, published jointly by American Public Health Association, American Water Works Association and Water Pollution Control Federation; Methods for Determination of Organic Compounds in Drinking Water, U.S. Environmental Protection Agency publication number EPA-600/4-79-020; or in accordance with other methods or procedures approved by the Director under ~~15A NCAC 2H .0805(a)(1);~~ Rule 2H .0805(a)(1) of this Chapter;
- (7) other EPA-approved analytical methods may be used if the methods include the same constituents as the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph and meet the detection limits of the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph; and
- (8) metals and acid extractable organic compounds shall be eliminated from analyses of groundwater samples collected pursuant to this Section if these compounds are not detected in the groundwater sample collected from the source area monitoring well installed pursuant to ~~15A NCAC 02L Rule .0405~~ of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
Recodified from 15A NCAC 02L .0115(o);
Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0414 REQUIRED LABORATORY CERTIFICATION

In accordance with ~~15A NCAC 02H .0804~~, Rule 2H .0804 of this Chapter, laboratories ~~are required to~~ shall obtain North Carolina Division of Water Quality laboratory certification for parameters that are required to be reported to the State in compliance with the State's surface water, ~~groundwater~~ groundwater, and pretreatment rules.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(p);
 Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0415 DISCHARGES OR RELEASES FROM OTHER SOURCES

This Section shall not relieve any person responsible for assessment or cleanup of contamination from a source other than a commercial or noncommercial underground storage tank from its obligation to assess and clean up contamination resulting from such discharge or releases.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(q);
 Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0501 PURPOSE AND SCOPE

(a) The purpose of this Section is to establish procedures for risk-based assessment and corrective action sufficient to:

- (1) protect human health and the environment;
- (2) abate and control contamination of the waters of the State as deemed necessary to protect human health and the environment;
- (3) permit management of the State's groundwaters to protect their designated current usage and potential future uses;
- (4) provide for anticipated future uses of the State's groundwater;
- (5) recognize the diversity of contaminants, the State's geology, and the characteristics of each individual site; and
- (6) accomplish these goals in a cost-efficient manner to assure the best use of the limited resources available to address groundwater pollution within the State.

(b) The applicable portions of Section .0100 ~~not specifically excluded apply to this Section of this Subchapter shall apply to this Section unless specifically excluded.~~

History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~ Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0502 DEFINITIONS

The definitions as set out in Rule .0102 of this Subchapter ~~apply to this Section, in addition the following definitions and~~ the following definitions shall apply throughout this Section:

- (1) "Aboveground storage tank" or "AST" means any one or a combination of ~~tanks (including underground tanks, including pipes connected thereto)~~ there to, that is used to contain an accumulation of petroleum.
- (2) "AST system" means an aboveground storage tank, connected ~~underground~~ piping, ~~underground~~ ancillary equipment, and containment system, if any.
- (3) "Discharge" includes any emission, spillage, leakage, pumping, pouring, emptying, or dumping of oil into groundwater or surface water or upon land in such proximity to such water that it is likely to reach the water and any discharge upon land which is intentional, knowing, or willful.
- (4) "Non-UST means as defined in G.S. 143-215.104AA(g) and excludes underground storage tank releases governed by G.S. 143-215.94V.
- (5) "Operator" means any person in control ~~of~~ or having responsibility for the daily operation of the AST system.
- (6) "Owner" means any person who owns a petroleum aboveground storage tank or other non-UST petroleum tank, stationary or mobile, used for storage, use, dispensing, or transport.
- (7) "Person" means an individual, trust, firm, joint stock company, Federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States Government.
- (8) "Petroleum" or "petroleum products" means as defined in G.S. 143-215.94A(10).
- (9) "Release" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing into groundwater, surface water, or surface or subsurface soils.
- (10) "Tank" means a device used to contain an accumulation of petroleum and constructed of non-earthen ~~materials (e.g., materials, such as concrete, steel, plastic)~~ plastic, that provides structural support.

History Note: Authority G.S. 143-212(4); 143-215.3(a)(1); 143-215.77; 143B-282; 143-215.84; 143-215.104AA; ~~Eff. March 1, 2016.~~ Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0503 RULE APPLICATION

~~This Section applies to any non-UST petroleum discharge.~~ The requirements of this Section shall apply to the owner and operator of a petroleum aboveground storage tank or other non-UST petroleum tank, stationary or mobile, from which a discharge or release occurred and to any person determined to be responsible for assessment and cleanup of a discharge or release from a non-UST petroleum ~~source. This includes any~~ source, including any person who has conducted or controlled an activity that results in the discharge or release of petroleum or petroleum products (as defined in G.S. 143-215.94A(10)) to the groundwaters of the ~~State,~~ State or in proximity thereto. These persons shall be collectively referred to as the "responsible party" for purposes of this Section.

*History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~ Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.*

15A NCAC 02L .0504 REQUIRED INITIAL RESPONSE AND ABATEMENT ACTIONS BY RESPONSIBLE PARTY

A responsible party shall:

- (1) take actions ~~to prevent any~~ further discharge or release of petroleum from the non-UST petroleum source; identify and mitigate ~~any~~ fire, explosion, or vapor hazard; and report the release within 24 hours of discovery, in compliance with G.S. 143-215.83(a), 84(a), and 85(b);
- (2) perform ~~initial~~ abatement actions to measure for the presence of a release where contamination is most likely to be present and to confirm the precise source of the release; ~~to~~ investigate to determine the possible presence of free ~~product and to product~~; begin free product removal; and to continue to monitor and mitigate ~~any~~ additional fire, explosion, or vapor hazards posed by vapors or by free product; and submit a report to the Department of Environmental Quality, UST Section, Regional Office Supervisor in accordance with 15A NCAC 02B .0309 and .0311, within 20 days after release confirmation summarizing these initial abatement actions;
- (3) remove contaminated soil that would act as continuing source of contamination to groundwater. For a new release, no further action shall be necessary ~~where~~ if:
 - (a) initial abatement actions involving control and removal of contaminated materials are initiated within 48 hours from discovery and before contaminated materials begin to impact groundwater; and
 - (b) analysis, in accordance with the approved methods in Rule .0412 of this Subchapter, of representative samples of remaining soils shows concentrations:
 - (i) at or below the more stringent of the soil-to-groundwater concentration value and the residential maximum soil contamination concentration value, or
 - (ii) using other ~~EPA approved~~ EPA approved analytical methods in accordance with Rule .0412(b)(7) of this ~~Subchapter~~ Subchapter, concentration values below the more stringent of the soil-to-groundwater concentration alkane and aromatic carbon fraction class values and the residential maximum soil contamination concentration alkane and aromatic carbon fraction class values,

~~Provided that, for new releases, if the abatement actions cannot be initiated within 48 hours of discovery, or if soil concentrations remain above the values in this Paragraph, the responsible party shall conduct all activities under Items (1) through (5) of this Rule;~~

For new releases, if the abatement actions cannot be initiated within 48 hours of discovery or if soil concentrations remain above the values in this Paragraph, the responsible party shall conduct all activities under Items (1) through (5) of this Rule;

- (4) conduct initial site assessment, assembling information about the site and the nature of the release, including the following:
- (a) ~~site~~ site history and site characterization, including data on nature and estimated quantity of release and data from available sources and site investigations concerning surrounding populations, water quality, use, and approximate locations of wells, surface water bodies, and subsurface structures potentially ~~effected~~ affected by the release, subsurface soil conditions, locations of subsurface utilities, climatological conditions, and ~~land use~~; land use;
 - (b) ~~results~~ the results of free product investigations and free product removal, if applicable;
 - (c) ~~results~~ the results of groundwater and surface water investigations, if applicable;
 - (d) ~~summary~~ a summary of initial response and abatement actions; and ~~submit this information in the report required under Item (5) of this Rule; and~~
- (5) ~~submit as required in Item (2) of this Rule, within 90 days of the discovery of the discharge or release an initial assessment and abatement report containing the site characterization information required in Item (4) of this Rule; soil assessment information sufficient to show that remaining unsaturated soil in the side walls and at the base of the excavation does not contain contaminant levels which exceed either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to Rule .0511 of this Section, whichever is lower; and documentation to show that neither bedrock nor groundwater was encountered in the excavation (or if groundwater was encountered, that contaminant concentrations in groundwater were equal to or less than the groundwater quality standards established in Rule .0202 of this Subchapter)-release:~~
- (a) an initial assessment and abatement report as required in Item (4) of this Rule;
 - (b) soil assessment information sufficient to show that remaining unsaturated soil in the side walls and at the base of the excavation does not contain contaminant levels that exceed either the soil-to-groundwater or the residential maximum soil contaminant concentrations established by the Department pursuant to Rule .0511 of this Section, whichever is lower; and
 - (c) documentation to show that neither bedrock nor groundwater was encountered in the excavation or, if groundwater was encountered, that contaminant concentrations in groundwater were equal to or less than the groundwater quality standards established in Rule .0202 of this Subchapter.

If such showing is made, the discharge or release shall be classified as low risk by the Department.

History Note: Authority *G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;*
Eff. March 1, 2016. Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0505 REQUIREMENTS FOR LIMITED SITE ASSESSMENT

If the required showing cannot be made by the responsible party under Rule .0504 of this Section, the responsible party shall submit within 120 days of the discovery of the discharge or release, a report as required in Rule .0504 of this Section,

containing information needed by the Department to classify the level of risk to human health and the environment posed by a discharge or release under Rule .0506 of this Section. The responsible party may request an extension prior to the deadline that demonstrates ~~to the Department~~ that the extension would not increase the risk posed by the release. When considering a request from a responsible party for additional time to submit the report, the Department shall consider the following:

- (a) the extent to which the request for additional time is due to factors outside of the control of the responsible party;
- (b) the previous history of the person submitting the report in complying with deadlines established under the Commission's rules;
- (c) the technical complications associated with assessing the extent of contamination at the site or identifying potential receptors; and
- (d) the necessity for action to eliminate an imminent threat to public health or the environment.

Such report shall include the following:

- (1) a location map, based on a USGS topographic map, showing the radius of 1500 feet from the source area of a confirmed release or discharge and depicting all water supply wells, surface waters, and designated "wellhead protection areas" as defined in 42 U.S.C. 300h-7(e) within the 1500-foot radius. 42 U.S.C. 300h-7(e), is incorporated by reference including subsequent amendments and editions. Copies may be obtained at no cost from the U.S. Government Bookstore's website at <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title42/html/USCODE-2010-title42-chap6A-subchapXII-partC-sec300h-7.htm>. The material is available for inspection at the Department of Environmental Quality, UST Section, 217 West Jones Street, Raleigh, NC 27603. For purposes of this Section, "~~source~~" source area" means point of release or discharge from the non-UST petroleum source, or if the point of release cannot be determined precisely, "source area" means the area of highest contaminant concentrations;
- (2) a determination of whether the source area of the discharge or release is within a designated "wellhead protection area" as defined in 42 U.S.C. 300h-7(e);
- (3) if the discharge or release is in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985, a determination of whether the source area of the discharge or release is located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer that is being used or may be used as a source of drinking water;
- (4) a determination of whether vapors from the discharge or release pose a threat of explosion due to the accumulation of vapors in a confined space; pose a risk to public health from exposure; or pose any other ~~serious~~ threat to public health, public safety, or the environment;
- (5) scaled site ~~map(s)~~ maps showing the location of the following that are on or adjacent to the property where the source is located:
 - (a) site boundaries;
 - (b) roads;
 - (c) buildings;
 - (d) basements;

- (e) floor and storm drains;
 - (f) subsurface utilities;
 - (g) septic tanks and leach fields;
 - (h) underground and aboveground storage tank systems;
 - (i) monitoring wells;
 - (j) water supply wells;
 - (k) surface water bodies and other drainage features;
 - (l) borings; and
 - (k) the sampling points;
- (6) the results from a limited site assessment that shall include the following actions:
- (a) determine the presence, the lateral and vertical extent, and the maximum concentration levels of soil and, if possible, groundwater contamination and free product accumulations;
 - (b) install monitoring wells constructed in accordance with 15A NCAC 02C ~~0108~~, 0108 within the area of maximum soil or groundwater contamination to determine the groundwater flow direction and maximum concentrations of dissolved groundwater contaminants or accumulations of free product. During well construction, the responsible party shall collect and analyze soil samples that represent the suspected highest contaminant-level locations by exhibiting visible contamination or elevated levels of volatile organic ~~compounds~~, compounds from successive locations at five-foot depth intervals in the boreholes of each monitoring well within the unsaturated zone; collect potentiometric data from each monitoring well; and collect and analyze groundwater or measure the amount of free product, if present, in each monitoring well;
- (7) the availability of public water supplies and the identification of properties served by the public water supplies within 1500 feet of the source area of a confirmed discharge or release;
- (8) the land use, including zoning if applicable, within 1500 feet of the source area of a confirmed discharge or release;
- (9) a discussion of ~~site-specific~~ site-specific conditions or possible actions that may result in lowering the risk classification assigned to the release. Such discussion shall be based on information known or required to be obtained under this Item; and
- (10) names and current addresses of all responsible parties for all petroleum sources for which a discharge or release is confirmed, the ~~owner(s)~~ owners of the land upon which such petroleum sources are located, and all potentially affected real property owners. Documentation of ownership of ASTs or other sources and of the property upon which a source is located shall be provided. ~~When considering a request from a responsible party for additional time to submit the report, the Department shall consider the following:~~
- (a) ~~the extent to which the request for additional time is due to factors outside of the control of the responsible party;~~
 - (b) ~~the previous history of the person submitting the report in complying with deadlines established under the Commission's rules;~~
 - (c) ~~the technical complications associated with assessing the extent of contamination at the site or identifying potential receptors; and~~

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

History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA.

Eff. March 1, 2016-Eff. March 1, 2016;

Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0506 DISCHARGE OR RELEASE CLASSIFICATIONS

The Department shall classify the risk of each known discharge or release as high, ~~intermediate~~intermediate, or low risk, unless the discharge or release has been classified under Rule .0504 of this Section. For purposes of this Section:

- (1) "High risk" means that:
 - (a) a water supply well, including one used for non-drinking purposes, has been contaminated by ~~the~~a release or discharge;
 - (b) a water supply well used for drinking water is located within 1000 feet of the source area of a confirmed discharge or release;
 - (c) a water supply well not used for drinking water is located within 250 feet of the source area of a confirmed discharge or release;
 - (d) the groundwater within 500 feet of the source area of a confirmed discharge or release has the potential for future use in that there is no source of water supply other than the groundwater;
 - (e) the vapors from ~~the~~a discharge or release pose a serious threat of explosion due to accumulation of the vapors in a confined space or pose a risk to public health from exposure; or
 - (f) ~~the~~a discharge or release poses an imminent danger to public health, public safety, or the environment.
- (2) "Intermediate risk" means that:
 - (a) surface water is located within 500 feet of the source area of a confirmed discharge or release and the maximum groundwater contaminant concentration exceeds the applicable surface water quality standards and criteria found in 15A NCAC 02B .0200 by a factor of 10;
 - (b) in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985, the source area of a confirmed discharge or release is located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer that the Department determines is being used or may be used as a source of drinking water;
 - (c) the source area of a confirmed discharge or release is within a designated wellhead protection area, as defined in 42 U.S.C. 300h-7(e);
 - (d) the levels of groundwater contamination for any contaminant except ethylene dibromide, benzene, and alkane and aromatic carbon fraction classes exceed 50 percent of the solubility of the contaminant at 25 degrees Celsius or 1,000 times the groundwater standard or interim standard established in Rule .0202 of this Subchapter, whichever is lower; or
 - (e) the levels of groundwater contamination for ethylene dibromide and benzene exceed 1,000 times the federal drinking water standard as referenced in 15A NCAC 18C ~~4518~~ is hereby 1518,

incorporated by reference including subsequent amendments and editions and is available free of charge at [http://reports.oah.state.nc.us/ncac/title 15a - environmental quality/chapter 18 - environmental health/subchapter c/15a ncac 18c .1518.pdf](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20c/15a%20ncac%2018c%20.1518.pdf).

- (3) "Low risk" means that:
- (a) the risk posed does not fall within the high or intermediate risk categories; or
 - (b) based on review of site-specific information, limited assessment, or interim corrective actions, ~~the Department determines that~~ the discharge or release poses no significant risk to human health or the environment.

If the criteria for more than one risk category applies, the discharge or release shall be classified at the highest risk level identified in Rule .0507 of this Section.

History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~ Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0507 RECLASSIFICATION OF RISK LEVELS

(a) It shall be a continuing obligation that each responsible party shall notify the Department of any changes that may affect the level of risk assigned to a discharge or release by the Department if the change is known or should be known by the responsible party, including changes in zoning of real property, use of real property, or the use of groundwater that has been contaminated or is expected to be contaminated by the discharge or release. The Department ~~may~~ shall reclassify the risk posed by a release if warranted by further information concerning the potential exposure of receptors to the discharge or release or upon receipt of new information concerning changed conditions at the site. After initial classification of the discharge or release, the Department may require limited assessment, interim corrective action, or other actions that the Department believes ~~may~~ will result in a lower risk classification. ~~It shall be a continuing obligation of each responsible party to notify the Department of any changes that may affect the level of risk assigned to a discharge or release by the Department if the change is known or should be known by the responsible party. Such changes may include changes in zoning of real property, use of real property, or the use of groundwater that has been contaminated or is expected to be contaminated by the discharge or release.~~

(b) Remediation of sites with off-site migration shall be subject to the provisions of G.S. 143-215.104AA.

(c) If the risk posed by a discharge or release is determined by the Department to be high risk, the responsible party shall comply with the assessment and cleanup requirements of Rule .0106(c), (g), and (h) of this Subchapter. The goal of ~~any~~ required corrective action for groundwater contamination shall be restoration to the level of the groundwater standards set forth in Rule .0202 of this Subchapter, or as closely thereto as is economically and technologically ~~feasible as determined by the Department.~~ feasible. In ~~any~~ corrective action plan submitted pursuant to this Paragraph, natural attenuation may be used when the benefits of its use shall not increase the risk to the environment and human ~~health as determined by the Department.~~ health. If the responsible party demonstrates that natural attenuation prevents the further migration of the plume, the Department may approve a groundwater monitoring plan.

(d) If the risk posed by a discharge or release is determined by the Department to be an intermediate risk, the responsible party shall comply with the assessment requirements of Rule .0106(c) and (g) of this Subchapter. As part of the

comprehensive site assessment, the responsible party shall evaluate, based on site specific conditions, whether the release poses a significant risk to human health or the environment. If the Department determines, based on the site-specific conditions, that the discharge or release does not pose a significant threat to human health or the environment, the site shall be reclassified as a low risk site. If the site is not reclassified, the responsible party shall, at the direction of the Department, submit a groundwater monitoring plan or a corrective action plan, or a combination thereof, meeting the cleanup standards of this Paragraph and containing the information required in Rule .0106(h) of this Subchapter. Discharges or releases that are classified as intermediate risk shall be remediated, at a minimum, to a cleanup level of 50 percent of the solubility of the contaminant at 25 degrees Celsius or 1,000 times the groundwater standard or interim standard established in Rule .0202 of this Subchapter, whichever is ~~lower~~ lower, for any groundwater contaminant except ethylene dibromide, benzene, and alkane and aromatic carbon fraction classes. Ethylene dibromide and benzene shall be remediated to a cleanup level of 1,000 times the federal drinking water standard as referenced in 15A NCAC 18C ~~.1518 is hereby~~ .1518, incorporated by reference including subsequent amendments and editions and ~~is~~ available free of charge at [http://reports.oah.state.nc.us/ncac/title 15a - environmental quality/chapter 18 - environmental health/subchapter c/15a ncac 18c .1518.pdf](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20c/15a%20ncac%2018c%20.1518.pdf). Additionally, if a corrective action plan or groundwater monitoring plan is required under this Paragraph, the responsible party shall demonstrate that the groundwater cleanup levels are sufficient to prevent a violation of:

- (1) the rules contained in 15A NCAC 02B;
- (2) the standards contained in Rule .0202 of this Subchapter in a deep aquifer as described in Rule .0506(2)(b) of this Section; and
- (3) the standards contained in Rule .0202 of this Subchapter at a location no closer than one year time of travel upgradient of a well within a designated wellhead protection area, based on travel time and the natural attenuation capacity of the subsurface materials or on a physical barrier to groundwater migration that exists or will be installed by the person making the request.

In any corrective action plan submitted pursuant to this Paragraph, natural attenuation may be used ~~when~~ if the benefits of its use ~~shall~~ will not increase the risk to the environment and human health and shall not increase the costs of the corrective action.

(e) If the risk posed by a discharge or release is determined ~~by the Department~~ to be a low risk, the Department shall notify the responsible party that no cleanup, no further cleanup, or no further action will be required by the Department, unless the Department later determines that the discharge or release poses an unacceptable risk or a potentially unacceptable risk to human health or the environment. No notification shall be issued pursuant to this Paragraph, however, until the responsible party ~~has completed soil remediation pursuant to Rule .0508 of this Section or as closely thereto as economically or technologically feasible as determined by the Department; has submitted proof of public notification and has recorded any land use restriction(s), if required; and paid any applicable statutorily authorized fees.~~ has:

- (1) completed soil remediation pursuant to 15A NCAC 02LRule .0408 of this Section except as provided in 15A NCAC 02LRule .0416 of this Section or as closely thereto as economically or technologically feasible;
- (2) submitted proof of public notification, if required;
- (3) recorded all required land-use restrictions; and
- (4) paid any applicable statutorily authorized fees.

~~The issuance by the Department of a notification under this Paragraph shall not affect any private right of action by any party that may be affected by the contamination.~~

*History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
Eff. March 1, 2016;
~~Amended Eff. March 1, 2017.~~ Amended Eff. March 1, 2017;
Readopted Eff. XX 1, 20XX.*

15A NCAC 02L .0508 ASSESSMENT AND REMEDIATION PROCEDURES

Assessment and remediation of soil contamination shall be addressed as follows:

- (1) At the time that the Department determines the risk posed by the discharge or release, the Department shall also determine, based on site-specific information, whether the site is "residential" or "industrial/commercial." For the purposes of this Section, a site is presumed residential, but may be classified as industrial/commercial if the Department determines based on site-specific information that exposure to the soil contamination is limited in time due to the use of the site and does not involve exposure to children. For the purposes of this Item, "site" means both the property upon which the discharge or release ~~has~~ occurred and any property upon that soil has been affected by the discharge or release.
- (2) The responsible party shall submit a report to the Department assessing the vertical and horizontal extent of soil contamination.
- (3) For a discharge or release classified by the Department as low risk, the responsible party shall submit a report demonstrating that soil contamination has been remediated to either the residential or industrial/commercial maximum soil contaminant concentration established by the Department pursuant to Rule .0511 of this Section, whichever is applicable.
- (4) For a discharge or release classified by the Department as high or intermediate risk, the responsible party shall submit a report demonstrating that soil contamination has been remediated to the lower of:
 - (a) the residential or industrial/commercial maximum soil contaminant concentration, whichever is applicable, that has been established by the Department pursuant to Rule .0511 of this Section; or
 - (b) the "soil-to-groundwater" maximum soil contaminant concentration that has been established by the Department pursuant to Rule .0511 of this Section.

*History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~ Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.*

15A NCAC 02L .0509 NOTIFICATION REQUIREMENTS

(a) A responsible party who submits a corrective action plan that proposes natural ~~attenuation~~attenuation, or to cleanup groundwater contamination to a standard other than a standard or interim standard established in Rule .0202 of this

Subchapter, or to cleanup soil other than to the standard for residential use or soil-to-groundwater contaminant concentration established pursuant to this Section, whichever is lowest, shall give notice to:

- (1) the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs;
- (2) all property owners and occupants within or contiguous to the area containing the contamination; and
- (3) all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.

~~Such~~The notice shall describe the nature of the plan and the reasons supporting it. Notification shall be made by certified mail concurrent with the submittal of the corrective action plan. Approval of the corrective action plan by the Department shall be postponed for a period of 30 days following receipt of the request so that the Department may consider ~~comments submitted~~comments. The responsible party shall, within 60 days, provide the Department with a copy of the notice and proof of receipt of each required ~~notice~~notice or of refusal by the addressee to accept delivery of a required notice. If notice by certified mail to occupants under this Paragraph is impractical, the responsible party may give notice by posting such notice in a prominent manner designed to give actual notice to the occupants. If notice is made to occupants by posting, the responsible party shall provide the Department with a copy of the posted notice and a description of the manner in which such posted notice was given.

(b) A responsible party who receives a notice pursuant to Rule .0507(d) of this Section for a discharge or release that has not been remediated to the groundwater standards or interim standards established in Rule .0202 of this Subchapter or to the lower of the residential or soil-to-groundwater contaminant concentrations established under Rule .0511 of this Section, shall, within 30 days of the receipt of such notice, provide a copy of the notice to:

- (1) the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs;
- (2) all property owners and occupants within or contiguous to the area containing contamination; and
- (3) all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.

Notification shall be made by certified mail. The responsible party shall, within 60 days, provide the Department with proof of receipt of the copy of the ~~notice~~notice or of refusal by the addressee to accept delivery of the copy of the notice. If notice by certified mail to occupants under this Paragraph is impractical, the responsible party may give notice by posting a copy of the notice in a prominent manner designed to give actual notice to the occupants. If notice is made to occupants by posting, the responsible party shall provide the Department with a description of the manner in which such posted notice was given.

*History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.104AA;
~~Eff. March 1, 2016.~~Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.*

15A NCAC 02L .0510 DEPARTMENTAL LISTING OF DISCHARGES OR RELEASES

~~To the extent feasible, the~~The Department shall maintain in each of the Department's regional offices a list of all non-UST petroleum discharges or releases discovered and reported to the Department within the region.

History Note: Authority G.S. 143-215.3(a)(1); 143B-282;
~~Eff. March 1, 2016.~~Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0511 ESTABLISHING MAXIMUM SOIL CONTAMINATION CONCENTRATIONS

For the purposes of risk-based assessment and remediation for non-UST petroleum releases, refer to Rule .0411 of this Subchapter for establishment of maximum soil contamination concentrations.

History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0512 ANALYTICAL PROCEDURES FOR SOIL SAMPLES

For the purposes of risk-based assessment and remediation for non-UST petroleum releases, refer to Rule .0412 of this Subchapter for analytical procedures for soil samples.

History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0513 ANALYTICAL PROCEDURES FOR GROUNDWATER SAMPLES

For purposes of risk-based assessment and remediation for non-UST petroleum releases, refer to Rule .0413 of this Subchapter for analytical procedures for groundwater samples.

History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0514 REQUIRED LABORATORY CERTIFICATION

In accordance with 15A NCAC 02H .0804, laboratories shall obtain North Carolina Division of Water Resources laboratory certification for parameters that ~~shall~~are required to be reported to the State in compliance with the State's surface water, groundwater, and pretreatment rules.

History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0515 DISCHARGES OR RELEASES FROM OTHER SOURCES

This Section shall not relieve any person responsible for assessment or cleanup of contamination from a source other than a non-UST petroleum release from its obligation to assess and clean up contamination resulting from such discharge or releases.

*History Note: Authority G.S. 143-215.3(a)(1); 143B-282; 143-215.84; 143-215.104AA;
~~Eff. March 1, 2016.~~ Eff. March 1, 2016;
Readopted Eff. XX 1, 20XX.*

Appendix E: Proposed Changes to 15A NCAC 02L Section .0400 Beyond Baseline

The proposed rule changes are as follows:

15A NCAC 02L .0401 PURPOSE AND SCOPE

(a) The purpose of this Section is to establish procedures for risk-based assessment and corrective action sufficient to:

- (1) protect human health and the environment;
- (2) abate and control contamination of the waters of the State as deemed necessary to protect human health and the environment;
- (3) permit management of the State's groundwaters to protect their designated current usage and potential future uses;
- (4) provide for anticipated future uses of the State's groundwater;
- (5) recognize the diversity of contaminants, the State's geology and the characteristics of each individual site; and
- (6) accomplish these goals in a cost-efficient manner to assure the best use of the limited resources available to address groundwater pollution within the State.

(b) The applicable portions of Section .0100 ~~not specifically excluded apply to this Section.~~ of this Subchapter shall apply to this Section unless specifically excluded.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(a); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0402 DEFINITIONS

The definitions as set out in ~~15A NCAC 02L~~ Rule .0102 of this Subchapter shall apply to this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0403 RULE APPLICATION

This Section ~~applies~~ shall apply to any discharge or release from a "commercial underground storage tank" or a "noncommercial underground storage tank," as those terms are defined in G.S. 143-215.94A, ~~which~~ that is reported on or after the effective date of this Section. ~~This Section shall apply to any discharge or release from a "commercial underground storage tank" or a "noncommercial underground storage tank," as those terms are defined in G.S. 143-215.94A which is reported before the effective date of this Section as provided in 15A NCAC 02L .0416 of this Section.~~ The requirements of this Section shall apply to the owner and operator of the underground storage tank from which the discharge or release occurred, a landowner seeking reimbursement from the Commercial Leaking Underground Storage Tank Fund or the

Noncommercial Leaking Underground Storage Tank Fund under G.S. 143-215.94E, and any other person responsible for the assessment or cleanup of a discharge or release from an underground storage tank, including any person who has conducted or controlled an activity ~~which~~that results in the discharge or release of petroleum or petroleum products as defined in G.S. 143-215.94A(10) to the groundwaters of the ~~State, State~~ or in proximity thereto; these persons shall be collectively referred to for purposes of this Section as the "responsible party." This Section shall be applied in a manner consistent with the rules found in ~~15A NCAC Subchapter 2N~~ in order to assure that the State's requirements regarding assessment and cleanup from underground storage tanks are no less stringent than Federal requirements.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(b); Amended Eff. December 1, ~~2005-2005~~; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0404 REQUIRED INITIAL ABATEMENT ACTIONS BY RESPONSIBLE PARTY

(a) A responsible party for a commercial underground storage tank shall:

- (1) take action to prevent ~~any~~all further discharge or release of petroleum from the underground storage tank; identify and mitigate ~~any~~all fire, ~~explosion, or explosion, and~~ vapor ~~hazard; hazards;~~ remove any free product; and comply with the requirements of Rules .0601 through .0604, .0701 through .0703, and .0705 of Subchapter 02N of this Chapter within 24 hours of discovery;
- (2) incorporate the requirements of ~~15A NCAC 02N Rule .0704~~ of Subchapter 02N of this Chapter into the submittal required under Item (3) of this Paragraph or the limited site assessment report required under ~~15A NCAC 02L Rule .0405~~ of this Section, whichever is applicable. The submittals shall constitute compliance with the reporting requirements of ~~15A NCAC 02N .0704(b); Rule .0704(b)~~ of Subchapter 02N of this Chapter; and
- (3) submit within 90 days of the discovery of the discharge or release a soil contamination report containing information sufficient to show that remaining unsaturated soil in the side walls and at the base of the excavation does not contain contaminant levels that exceed either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to ~~15A NCAC 02L Rule .0411~~ of this Section, whichever is lower. If the showing is made, the discharge or release shall be classified as low risk by the Department as defined in Rules .0406 and .0407 of this Section.

(b) A responsible party for a noncommercial underground storage tank shall:

- (1) take necessary actions to protect public health, safety, and welfare and the environment, including actions to prevent ~~any~~all further discharge or release of petroleum from the noncommercial underground storage tank; to identify and mitigate ~~any~~all fire, explosion, ~~or~~and vapor ~~hazard; hazards;~~ and to report the release within 24 hours of discovery, in compliance with G.S. 143-215.83(a), G.S. 143-215.84(a), G.S. 143-215.85(b), and G.S. 143-215.94E; and
- (2) provide or otherwise make available any information required by the Department to determine the site risk as described in Rules .0405, .0406, and .0407 of this Section.

(c) The Department shall notify the responsible party for a noncommercial underground storage tank that no cleanup, no further cleanup, or no further action shall be required without requiring additional soil remediation pursuant to Rule .0408 of this ~~Section~~Section if the site is determined by the Department to be low risk. This classification shall be based on information provided to the Department that:

- (1) describes the source and type of the petroleum release, site-specific risk factors, and risk factors present in the surrounding area as defined in Rules .0406 and .0407 of this Section;
- (2) demonstrates that no remaining risk factors are present that are likely to be affected per G.S. 143-215.94V(b); or
- (3) documents that soils remaining onsite do not contain contaminant levels that exceed either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to Rule .0411 of this Section, whichever is lower.

The Department shall reclassify the site as high risk, as defined in Rule .0406(1) of this Section, upon receipt of new information related to site conditions indicating that the discharge or release from a noncommercial underground storage tank poses an unacceptable risk or a potentially unacceptable risk to human health or the environment, as described in Rule .0407 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(c)(1)-(3); Amended Eff. December 1, ~~2005-2005~~; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0405 REQUIREMENTS FOR LIMITED SITE ASSESSMENT

If the required showing for a commercial underground storage tank cannot be made or if the Department determines that a release from a noncommercial underground storage tank represents an unacceptable risk under ~~15A NCAC 02L~~Rule .0404 of this Section, the responsible party shall submit within 120 days of the discovery of the discharge or release, or within such other greater time limit approved by the Department pursuant to Item (10) of this Rule, a report containing information needed by the Department to classify the level of risk to human health and the environment posed by a discharge or release under ~~15A NCAC 02L~~Rule .0406 of this Section. When considering a request from a responsible party for additional time to submit the report, the Department shall consider the following:

- (a) the extent to which the request for additional time is due to factors outside of the control of the responsible party;
- (b) the previous history of the person submitting the report in complying with deadlines established under the Commission's rules;
- (c) the technical complications associated with assessing the extent of contamination at the site or identifying potential receptors; and
- (d) the necessity for action to eliminate an imminent threat to public health or the environment.

The report shall include:

- (1) a location map, based on a USGS topographic map, showing the radius of 1500 feet from the source area of a confirmed release or discharge and depicting all water supply wells, surface waters, and designated wellhead protection areas as defined in 42 U.S.C. 300h-7(e) within the 1500-foot radius. 42 U.S.C. 300h-7(e), is incorporated by reference including subsequent amendments and editions. Copies may be obtained at no cost from the U.S. Government Bookstore's website at <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title42/html/USCODE-2010-title42-chap6A-subchapXII-partC-sec300h-7.htm>. The material is available for inspection at the Department of Environmental Quality, UST Section, 217 West Jones Street, Raleigh, NC 27603. For purposes of this Section, source area means the point of release or discharge from the underground storage tank system;
- (2) a determination of whether the source area of the discharge or release is within a designated wellhead protection area as defined in 42 U.S.C. 300h-7(e);
- (3) if the discharge or release is in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985, a determination of whether the source area of the discharge or release is located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer that is being used or may be used as a source of drinking water;
- (4) a determination of whether vapors from the discharge or release pose a threat of explosion due to the accumulation of vapors in a confined space or pose any other serious threat to public health, public safety, or the environment;
- (5) scaled site ~~map(s)~~ maps showing the location of the following that are on or adjacent to the property where the source is located: ~~site boundaries, roads, buildings, basements, floor and storm drains, subsurface utilities, septic tanks and leach fields, underground storage tank systems, monitoring wells, borings, and the sampling points;~~
- (6) the results from a limited site assessment that shall include:
 - (a) the analytical results from soil samples collected during the construction of a monitoring well installed in the source area of each confirmed discharge or release from a noncommercial or commercial underground storage tank and either the analytical results of a groundwater sample collected from the well or, if free product is present in the well, the amount of free product in the well. The soil samples shall be collected every five feet in the unsaturated zone unless a water table is encountered at or greater than a depth of 25 feet from land surface in which case soil samples shall be collected every 10 feet in the unsaturated zone. The soil samples shall be collected from suspected worst-case locations exhibiting visible contamination or elevated levels of volatile organic compounds in the borehole;
 - (b) if any constituent in the groundwater sample from the source area monitoring well installed in accordance with Sub-item (a) of this Item, for a site meeting the high risk classification in ~~15A NCAC 02L .0406(1)~~, Rule .0406(1) of this Section, exceeds the standards or interim standards established in ~~15A NCAC 02L Rule .0202 of this Subchapter~~ by a factor of 10 and is a discharge or release from a commercial underground storage tank, the analytical results from a groundwater sample collected from each of three additional monitoring wells or, if free product is present in any of the wells, the amount of free product in such well. The three additional

monitoring wells shall be installed as follows: ~~as best as may be determined,~~ one upgradient of the source of contamination and two downgradient of the source of contamination. The monitoring wells installed upgradient and downgradient of the source of contamination shall be located such that groundwater flow direction may be determined; and

- (c) potentiometric data from all required wells;
- (7) the availability of public water supplies and the identification of properties served by the public water supplies within 1500 feet of the source area of a confirmed discharge or release;
- (8) the land use, including zoning if applicable, within 1500 feet of the source area of a confirmed discharge or release;
- (9) a discussion of ~~site-specific~~ site-specific conditions or possible actions that could result in lowering the risk classification assigned to the release. The discussion shall be based on information known or required to be obtained under this Paragraph; and
- (10) names and current addresses of all owners and operators of the underground storage tank systems for which a discharge or release is confirmed, the ~~owner(s)~~ owners of the land upon which such systems are located, and all potentially affected real property owners. ~~When considering a request from a responsible party for additional time to submit the report, the Division shall consider the extent to which the request for additional time is due to factors outside of the control of the responsible party, the previous history of the person submitting the report in complying with deadlines established under the Commission's rules, the technical complications associated with assessing the extent of contamination at the site or identifying potential receptors, and the necessity for action to eliminate an imminent threat to public health or the environment.~~

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(c)(4); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0406 DISCHARGE OR RELEASE CLASSIFICATIONS

The Department shall classify the risk of each known discharge or release as high, intermediate, or low risk unless the discharge or release has been classified under ~~15A NCAC 02L .0404(a)(3)~~ Rule .0404(a)(3) or .0404(c) of this Section. For purposes of this Section:

- (1) "High risk" means that:
 - (a) a water supply well, including one used for non-drinking purposes, has been contaminated by ~~the~~ a release or discharge;
 - (b) a water supply well used for drinking water is located within 1000 feet of the source area of a confirmed discharge or release from a commercial underground storage tank or a noncommercial underground storage tank storing motor fuel as defined by G.S. 143-215.94A(2)a., (7);

- (c) a water supply well not used for drinking water is located within 250 feet of the source area of a confirmed discharge or release from a commercial underground storage tank or a noncommercial underground storage tank storing motor fuel as defined by G.S. 143-215.94A(2)a., (7);
 - (d) the groundwater within 500 feet of the source area of a confirmed discharge or release from a commercial underground storage tank or a noncommercial underground storage tank storing motor fuel as defined by G.S. 143-215.94A(2)a., (7) has the potential for future use in that there is no source of water supply other than the groundwater;
 - (e) a water supply well, including one used for non-drinking purposes, is located within 150 feet of the source area of a confirmed discharge or release from a noncommercial underground storage tank storing heating oil for consumptive use on the premises;
 - (f) the vapors from ~~the~~ discharge or release pose a serious threat of explosion due to accumulation of the vapors in a confined space; or
 - (g) ~~the~~ discharge or release poses an imminent danger to public health, public safety, or the environment.
- (2) "Intermediate risk" means that:
- (a) surface water is located within 500 feet of the source area of a confirmed discharge or release from a commercial underground storage tank and the maximum groundwater contaminant concentration exceeds the applicable surface water quality standards and criteria found in ~~15A NCAC~~ Rule 02B .0200 of this Chapter by a factor of 10;
 - (b) in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985, the source area of a confirmed discharge or release from a commercial underground storage tank is located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer ~~which~~ that the Department determines is being used or may be used as a source of drinking water;
 - (c) the source area of a confirmed discharge or release from a commercial underground storage tank is within a designated wellhead protection area, as defined in 42 U.S.C. 300h-7(e);
 - (d) the levels of groundwater contamination associated with a confirmed discharge or release from a commercial underground storage tank for any contaminant except ethylene dibromide, benzene, and alkane and aromatic carbon fraction classes exceed 50 percent of the solubility of the contaminant at 25 degrees Celsius or 1,000 times the groundwater standard or interim standard established in ~~15A NCAC 02L .0202~~ Rule .0202 of this Subchapter, whichever is lower; or
 - (e) the levels of groundwater contamination associated with a confirmed discharge or release from a commercial underground storage tank for ethylene dibromide and benzene exceed 1,000 times the federal drinking water standard set out in 40 CFR 141. 40 CFR 141, is incorporated by reference including subsequent amendments and editions. Copies may be obtained at no cost from the U.S. Government Bookstore's website at <https://www.gpo.gov/fdsys/pkg/CFR-2015-title40-vol23/pdf/CFR-2015-title40-vol23-part141.pdf>. The material is available for inspection

at the Department of Environmental Quality, UST Section, 217 West Jones Street, Raleigh, NC 27603.

- (3) "Low risk" means that:
- (a) the risk posed does not fall within the high risk category for any underground storage tank, or within the intermediate risk category for a commercial underground storage tank; or
 - (b) based on review of site-specific information, limited assessment, or interim corrective actions, ~~the Department determines that~~ the discharge or release poses no significant risk to human health or the environment.

If the criteria for more than one risk category applies, the discharge or release shall be classified at the highest risk level identified in ~~15A NCAC 02L~~Rule .0407 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(d); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0407 RECLASSIFICATION OF RISK LEVELS

(a) It shall be a continuing obligation that each responsible party shall notify the Department of any changes that may affect the level of risk assigned to a discharge or release by the Department if the change is known or should be known by the responsible party, including changes in zoning of real property, use of real property, or the use of groundwater that has been contaminated or is expected to be contaminated by the discharge or release. The Department ~~may~~shall reclassify the risk posed by a release if warranted by further information concerning the potential exposure of receptors to the discharge or release or upon receipt of new information concerning changed conditions at the site. After initial classification of the discharge or release, the Department may require limited assessment, interim corrective action, or other actions ~~which~~that the Department believes will result in a lower risk classification. ~~It shall be a continuing obligation of each responsible party to notify the Department of any changes that might affect the level of risk assigned to a discharge or release by the Department if the change is known or should be known by the responsible party. Such changes shall include, but shall not be limited to, changes in zoning of real property, use of real property or the use of groundwater that has been contaminated or is expected to be contaminated by the discharge or release, if such change could cause the Department to reclassify the risk.~~

(b) If the risk posed by a discharge or release is determined by the Department to be high risk, the responsible party shall comply with the assessment and cleanup requirements of Rule .0106(c), ~~(g)~~(g), and (h) of this Subchapter and ~~15A NCAC~~Rule 02N .0706 and ~~.0707~~.0707 of this Chapter. The goal of ~~any~~any required corrective action for groundwater contamination shall be restoration to the level of the groundwater standards set forth in ~~15A NCAC 02L~~Rule .0202 of this Subchapter or as closely thereto as is economically and technologically feasible. In ~~any~~any corrective action plan submitted pursuant to this Paragraph, natural attenuation shall be used to the maximum extent ~~possible~~possible, when the benefits of its use shall not increase the risk to the environment and human health. If the responsible party demonstrates that natural attenuation prevents the further migration of the plume, the Department may approve a groundwater monitoring plan.

(c) If the risk posed by a discharge or release is determined by the Department to be an intermediate risk, the responsible party shall comply with the assessment requirements of ~~15A NCAC 02L Rule .0106(c) and (g) of this Subchapter and 15A NCAC 02N .0706. Rule 02N .0706 of this Chapter.~~ As part of the comprehensive site assessment, the responsible party shall evaluate, based on site specific conditions, whether the release poses a significant risk to human health or the environment. If the Department determines, based on the site-specific conditions, that the discharge or release does not pose a significant threat to human health or the environment, the site shall be reclassified as a low risk site. If the site is not reclassified, the responsible party shall, at the direction of the Department, submit a groundwater monitoring plan or a corrective action plan, or a combination thereof, meeting the cleanup standards of this Paragraph and containing the information required in ~~15A NCAC 02L Rule .0106(h) of this Subchapter and 15A NCAC 02N .0707. Rule 02N .0707 of this Chapter.~~ Discharges or releases ~~which that~~ are classified as intermediate risk shall be remediated, at a minimum, to a cleanup level of 50 percent of the solubility of the contaminant at 25 degrees Celsius or 1,000 times the groundwater standard or interim standard established in ~~15A NCAC 02L .0202. Rule .0202 of this Subchapter,~~ whichever is ~~lower lower,~~ for any groundwater contaminant except ethylene dibromide, benzene and alkane and aromatic carbon fraction classes. Ethylene dibromide and benzene shall be remediated to a cleanup level of 1,000 times the federal drinking water standard ~~set out in 40 CFR 141 as referenced in Rule 18C .1518 of this Chapter incorporated by reference including subsequent amendments and editions, and available free of charge at [http://reports.oah.state.nc.us/ncac/title 15a - environmental quality/chapter 18 - environmental health/subchapter c/15a ncac 18c .1518.pdf](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20c/15a%20ncac%2018c%20.1518.pdf).~~ Additionally, if a corrective action plan or groundwater monitoring plan is required under this Paragraph, the responsible party shall demonstrate that the groundwater cleanup levels are sufficient to prevent a violation of:

- (1) the rules contained in ~~15A NCAC 02B; Subchapter 02B of this Chapter;~~
- (2) the standards contained in ~~15A NCAC 02L Rule .0202 of this Subsection~~ in a deep aquifer as described in ~~15A NCAC 02L Rule .0406(2)(b) of this Section; and~~
- (3) the standards contained in ~~15A NCAC 02L Rule .0202 of this Subsection~~ at a location no closer than one year time of travel upgradient of a well within a designated wellhead protection area, based on travel time and the natural attenuation capacity of the subsurface materials or on a physical barrier to groundwater migration that exists or will be installed by the person making the request.

In any corrective action plan submitted pursuant to this Paragraph, natural attenuation shall be used to the maximum extent ~~possible possible, if the benefits of its use will not increase the risk to the environment and human health.~~

(d) If the risk posed by a discharge or release is determined ~~by the Department~~ to be a low risk, the Department shall notify the responsible party that no cleanup, no further ~~cleanup cleanup,~~ or no further action will be required by the Department unless the Department later determines that the discharge or release poses an unacceptable risk or a potentially unacceptable risk to human health or the environment. No notification ~~will shall~~ be issued pursuant to this Paragraph, however, until the responsible party ~~has completed soil remediation pursuant to 15A NCAC 02L .0408 of this Section except as provided in 15A NCAC 02L .0416 of this Section or as closely thereto as economically or technologically feasible, has:~~

- (1) completed soil remediation pursuant to 15A NCAC 02L Rule .0408 of this Section or as closely thereto as economically or technologically feasible;
- (2) submitted proof of public notification, if required; and
- (3) recorded all required land-use restrictions.

~~The issuance by the Department of a notification under this Paragraph shall not affect any private right of action by any party which may be affected by the contamination.~~

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(e)-(h); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0408 ASSESSMENT AND REMEDIATION PROCEDURES

Assessment and remediation of soil contamination shall be addressed as follows:

- (1) At the time that the Department determines the risk posed by the discharge or release, the Department shall also determine, based on site-specific information, whether the site is "residential" or "industrial/commercial." For purposes of this Section, a site is presumed residential, but may be classified as industrial/commercial if the Department determines based on site-specific information that exposure to the soil contamination is limited in time due to the use of the site and shall not involve exposure to children. For purposes of this Paragraph, "site" means both the property upon which the discharge or release has occurred and any property upon which soil has been affected by the discharge or release.
- (2) For any discharge or release from a commercial underground storage tank, or for a discharge or release from a noncommercial underground storage tank classified by the Department as high risk, the responsible party shall submit a report to the Department assessing the vertical and horizontal extent of soil ~~contamination,~~contamination in excess of the lower of:
 - (a) the residential or industrial/commercial maximum soil contaminant concentration, whichever is applicable, that has been established by the Department pursuant to Rule .0411 of this Section;
or
 - (b) the "soil-to-groundwater" maximum soil contaminant concentration that has been established by the Department pursuant to Rule .0411 of this Section.
- (3) For a discharge or release from a commercial underground storage tank classified by the Department as low risk, the responsible party shall submit a report demonstrating that soil contamination has been remediated to either the residential or industrial/commercial maximum soil contaminant concentration established by the Department pursuant to ~~15A NCAC 02L~~Rule .0411 of this Section, whichever is applicable.
- (4) For a discharge or release classified by the Department as high or intermediate risk, the responsible party shall submit a report demonstrating that soil contamination has been remediated to the lower of:
 - (a) the residential or industrial/commercial maximum soil contaminant concentration, whichever is applicable, that has been established by the Department pursuant to ~~15A NCAC 02L~~Rule .0411 of this Section; or
 - (b) the "soil-to-groundwater" maximum soil contaminant concentration that has been established by the Department pursuant to ~~15A NCAC 02L~~Rule .0411 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(i); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0409 NOTIFICATION REQUIREMENTS

(a) A responsible party who submits a corrective action plan that proposes natural attenuation, to cleanup groundwater contamination to a standard other than a standard or interim standard established in ~~15A NCAC 02L .0202~~, Rule .0202 of this Subchapter, or to cleanup soil other than to the standard for residential use or soil-to-groundwater contaminant concentration established pursuant to this Section, whichever is lowest, shall give notice to: ~~the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs; all property owners and occupants within or contiguous to the area containing the contamination; and all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.~~

- (1) the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs;
- (2) all property owners and occupants within or contiguous to the area containing the contamination; and
- (3) all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.

The notice shall describe the nature of the plan and the reasons supporting it. Notification shall be made by certified mail concurrent with the submittal of the corrective action plan. Approval of the corrective action plan by the Department shall be postponed for a period of ~~30~~60 days following receipt of the request so that the Department may consider ~~comments submitted~~comments. The responsible party shall, within ~~a time frame determined by the Department to be sufficient,~~30 days, provide the Department with a copy of the notice and proof of receipt of each required ~~notice,~~notice or of refusal by the addressee to accept delivery of a required notice. If notice by certified mail to occupants under this Paragraph is impractical, the responsible party shall give notice ~~by posting the notice in a manner designed to give actual notice to the occupants as provided in G.S. 1A-1, Rule 4(j) or Rule 4(j1).~~ If notice is made to occupants by posting, the responsible party shall provide the Department with a copy of the posted notice and a description of the manner in which such posted notice was given.

(b) A responsible party who receives a notice from the Department pursuant to ~~15A NCAC 02L~~Rule .0404(c) or .0407(d) of this Section for a discharge or release that has not been remediated to the groundwater standards or interim standards established in Rule .0202 of this Subchapter or to the lower of the residential or soil-to-groundwater contaminant concentrations established under ~~15A NCAC 02L~~Rule .0411 of this Section, shall, within 30 days of the receipt of such notice, provide a copy of the notice to: ~~the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs; all property owners and occupants within or contiguous to the area containing contamination; and all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.~~

- (1) the local Health Director and the chief administrative officer of each political jurisdiction in which the contamination occurs;
- (2) all property owners and occupants within or contiguous to the area containing the contamination; and
- (3) all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.

Notification shall be made by certified mail. The responsible party shall, within ~~a time frame determined by the Department,~~ 60 days of receipt of the original notice from the Department, provide the Department with proof of receipt of the copy of the ~~notice,~~ notice or of refusal by the addressee to accept delivery of the copy of the notice. If notice by certified mail to occupants under this Paragraph is impractical, the responsible party shall give notice ~~by posting a copy of the notice in a manner designed to give actual notice to the occupants, as provided in G.S. 1A-1, Rule 4(j) or Rule 4(j1).~~ If notice is made to occupants by posting, the responsible party shall provide the Department with a description of the manner in which the posted notice was given.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(j) and (k); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0410 DEPARTMENTAL LISTING OF DISCHARGES OR RELEASES

~~To the extent feasible, the~~ The Department shall maintain in each of the Department's regional offices a list of all petroleum underground storage tank discharges or releases discovered and reported to the Department within the region on or after the effective date of this Section and all petroleum underground storage tank discharges or releases for which notification was issued under ~~15A NCAC 02L~~ Rule .0407(d) of this Section by the Department on or after the effective date of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1; Recodified from 15A NCAC 02L .0115(l); Amended Eff. December 1, 2005-2005; Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0411 ESTABLISHING MAXIMUM SOIL CONTAMINATION CONCENTRATIONS

The Department shall ~~publish,~~ publish and annually ~~revise,~~ revise maximum soil contaminant concentrations to be used as soil cleanup levels for contamination from petroleum underground storage tank systems. The Department shall establish maximum soil contaminant concentrations for residential, industrial/commercial and soil-to-groundwater exposures as follows:

- (1) The following equations and references shall be used in establishing residential maximum soil contaminant concentrations. Equation 1 shall be used for each contaminant with an EPA carcinogenic classification of A, B1, B2, C, D or E. Equation 2 shall be used for each contaminant with an EPA

carcinogenic classification of A, B1, B2 or C. The maximum soil contaminant concentration shall be the lower of the concentrations derived from Equations 1 and 2.

- (a) Equation 1: Non-cancer Risk-based Residential Ingestion Concentration
 Soil mg/kg = $[0.2 \times \text{oral chronic reference dose} \times \text{body weight, age 1 to 6} \times \text{averaging time noncarcinogens}] / [\text{exposure frequency} \times \text{exposure duration, age 1 to 6} \times (\text{soil ingestion rate, age 1 to 6} / 10^6 \text{ mg/kg})]$.
- (b) Equation 2: Cancer Risk-based Residential Ingestion Concentration
 Soil mg/kg = $[\text{target cancer risk of } 10^{-6} \times \text{averaging time carcinogens}] / [\text{exposure frequency} \times (\text{soil ingestion factor, age adjusted} / 10^6 \text{ mg/kg}) \times \text{oral cancer slope factor}]$. The age adjusted soil ingestion factor shall be calculated by: $[(\text{exposure duration, age 1 to 6} \times \text{soil ingestion rate, age 1 to 6}) / (\text{body weight, age 1 to 6})] + [((\text{exposure duration, total} - \text{exposure duration, age 1 to 6}) \times \text{soil ingestion, adult}) / (\text{body weight, adult})]$.
- (c) The exposure factors selected in calculating the residential maximum soil contaminant concentrations shall be within the recommended ranges specified in the following references or the most recent version of these references:
- (i) EPA, ~~1990~~, 2011. Exposure Factors Handbook;
 - (ii) EPA, 1991. Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part B, Development of Risk Based Preliminary Remediation Goals);
 - (iii) ~~EPA Region III. Risk based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>; EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>; and~~
 - (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment~~, 2018. Region 4 Human Health Risk Assessment Supplemental Guidance, including future amendments.
- (d) The following references or the most recent version of these references, in order of preference, shall be used to obtain oral chronic reference doses and oral cancer slope factors:
- (i) EPA. Integrated Risk Information System (IRIS) Computer Database;
 - (ii) EPA. Health Effects Assessment Summary Tables (HEAST);
 - (iii) ~~EPA Region III. Risk based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>; EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>;~~
 - (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment~~, 2018. Region 4 Human Health Risk Assessment Supplemental Guidance, including future amendments; and

- (v) Other appropriate, published health risk assessment data, and scientifically valid peer-reviewed published toxicological data.
- (2) The following equations and references shall be used in establishing industrial/commercial maximum soil contaminant concentrations. Equation 1 shall be used for each contaminant with an EPA carcinogenic classification of A, B1, B2, C, D or E. Equation 2 shall be used for each contaminant with an EPA carcinogenic classification of A, B1, B2 or C. The maximum soil contaminant concentration shall be the lower of the concentrations derived from Equations 1 and 2.
- (a) Equation 1: Non-cancer Risk-based Industrial/Commercial Ingestion Concentration

$$\text{Soil mg/kg} = [0.2 \times \text{oral chronic reference dose} \times \text{body weight, adult} \times \text{averaging time noncarcinogens}] / [\text{exposure frequency} \times \text{exposure duration, adult} \times (\text{soil ingestion rate, adult} / 10^6 \text{ mg/kg}) \times \text{fraction of contaminated soil ingested}].$$
- (b) Equation 2: Cancer Risk-based Industrial/Commercial Ingestion Concentration

$$\text{Soil mg/kg} = [\text{target cancer risk of } 10^{-6} \times \text{body weight, adult} \times \text{averaging time carcinogens}] / [\text{exposure frequency} \times \text{exposure duration, adult} \times (\text{soil ingestion rate, adult} / 10^6 \text{ mg/kg}) \times \text{fraction of contaminated soil ingested} \times \text{oral cancer slope factor}].$$
- (c) The exposure factors selected in calculating the industrial/commercial maximum soil contaminant concentrations shall be within the recommended ranges specified in the following references or the most recent version of these references:
- (i) EPA, ~~1990,2011~~. Exposure Factors Handbook;
- (ii) EPA, 1991. Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual (Part B, Development of Risk Based Preliminary Remediation Goals);
- (iii) ~~EPA Region III. Risk based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>; EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>; and~~
- (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment,2018. Region 4 Human Health Risk Assessment Supplemental Guidance,~~ including future amendments.
- (d) The following references or the most recent version of these references, in order of preference, shall be used to obtain oral chronic reference doses and oral cancer slope factors:
- (i) EPA. Integrated Risk Information System (IRIS) Computer Database;
- (ii) EPA. Health Effects Assessment Summary Tables (HEAST);
- (iii) ~~EPA Region III. Risk based Concentration Tables (RBC Tables). Office of RCRA, Technical and Program Support Branch. Available at: <http://www.epa.gov/reg3hwmd/index.html>; EPA. Regional Screening Level Generic Tables (RSL) and User's Guide. Available at <https://www.epa.gov/risk/regional-screening-levels-rsls>;~~

- (iv) ~~EPA, 1995. Supplemental Guidance to RAGS: Region 4 Bulletins Human Health Risk Assessment, 2018. Region 4 Human Health Risk Assessment Supplemental Guidance,~~ including future amendments; and
 - (v) Other appropriate, published health risk assessment data, and scientifically valid peer-reviewed published toxicological data.
- (3) The following equations and references shall be used in establishing the soil-to-groundwater maximum contaminant concentrations:
- (a) Organic Constituents:

$$\text{Soil mg/kg} = \text{groundwater standard or interim standard} \times [(.02 \times \text{soil organic carbon-water partition coefficient}) + 4 + (1.733 \times 41 \times \text{Henry's Law Constant (atm.-m}^3/\text{mole)})]$$
 - (i) If no groundwater standard or interim standard has been established under Rule .0202 of this Subchapter, the practical quantitation limit shall be used in lieu of a standard to calculate the soil-to-groundwater maximum contaminant concentrations.
 - (ii) The following references or the most recent version of these references, in order of preference, shall be used to obtain soil organic carbon-water partition coefficients and Henry's Law Constants:
 - (A) ~~EPA, 1996. Soil Screening Guidance: Technical Background Document. (EPA/540/R95/128);~~ EPA. Superfund Chemical Data Matrix (SCDM), available at <https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm>. SCDM is referenced as an original source for the EPA, 1996, Soil Screening Guidance: Technical Background Document. (EPA/540/R95/128) and the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (EPA, OSWER 9355.4-24), and users are instructed in Appendix C of the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, to obtain the most recent values from the referenced sources;
 - (B) ~~EPA, 1986. Superfund Public Health Evaluation Manual. Office of Emergency and Remedial Response (EPA/540/1-86/060);~~ 1991. Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual; it is Volume I of the two-volume set called Risk Assessment Guidance for Superfund available at <https://www.epa.gov/risk/risk-assessment-guidance-superfund-rags-part>;
 - (C) Agency for Toxic Substances and Disease Registry, "Toxicological Profile for [individual chemical]." U.S. Public Health Service;
 - (D) Montgomery, J.H., ~~1996;~~ 2007. Groundwater Chemicals Desk Reference. CRC Press, Inc; and
 - ~~(E) Sims, R.C., J.L. Sims and S.G. Hansen, 1991. Soil Transport and Fate Database, Version 2.0. EPA Robert S. Kerr Environmental Laboratory;~~ and
 - ~~(F)~~ (E) Other appropriate, published, peer-reviewed and scientifically valid data.

(b) Inorganic Constituents:

Soil mg/kg = groundwater standard or interim standard x [(20 x soil-water partition coefficient for pH of 5.5) + 4 + (1.733 x 41 x Henry's Law Constant (atm.-m³/mole))].

- (i) If no groundwater standard or interim standard has been established under Rule .0202 of this Subchapter, the practical quantitation limit shall be used in lieu of a standard to calculate the soil-to-groundwater maximum contaminant concentrations.
- (ii) The following references or the most recent version of these references, in order of preference, shall be used to obtain soil-water partition coefficients and Henry's Law Constants:

- (A) ~~EPA, 1996. Soil Screening Guidance: Technical Background Document (EPA/540/R95/128);~~ EPA. Superfund Chemical Data Matrix (SCDM), available at <https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm>. SCDM is referenced as an original source for the EPA, 1996, Soil Screening Guidance: Technical Background Document (EPA/540/R95/128) and the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (EPA, OSWER 9355.4-24), and users are instructed in Appendix C of the 2002, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, to obtain the most recent values from the referenced sources;
- (B) Baes, C.F., III, R.D. Sharp, A.L. Sjoreen, and R.W. Shor, 1984. A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides Through Agriculture. Oak Ridge National Laboratory;
- (C) Agency for Toxic Substances and Disease Registry, "Toxicological Profile for [individual chemical]." U.S. Public Health Service; and
- ~~(D) Sims, R.C., J.L. Sims and S.G. Hansen, 1991. Soil Transport and Fate Database, Version 2.0. EPA Robert S. Kerr Environmental Laboratory; and~~
- ~~(E)~~ (D) Other appropriate, published, peer-reviewed and scientifically valid data.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
Recodified from 15A NCAC 02L .0115(m);
Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0412 ANALYTICAL PROCEDURES FOR SOIL SAMPLES

(a) Analytical procedures for soil samples required under this Section, ~~except as provided in 15A NCAC 02L .0417 of this Section,~~ shall be methods accepted by the US EPA as suitable for determining the presence and concentration of petroleum hydrocarbons for the type of petroleum released.

(b) A sufficient number of soil samples collected, including the most contaminated sample, shall be analyzed as follows in order to determine the risks of the constituents of contamination:

- (1) soil samples collected from a discharge or release of low boiling point fuels, ~~including, but not limited to, including~~ gasoline, aviation ~~gasoline~~gasoline, and gasohol, shall be analyzed for volatile organic compounds and ~~additives~~additives, including isopropyl ether and methyl tertiary butyl ether, using EPA Method 8260, ~~including isopropyl ether and methyl tertiary butyl ether;~~8260;
- (2) soil samples collected from a discharge or release of high boiling point fuels, ~~including, but not limited to, including~~ kerosene, diesel, varsol, mineral spirits, naphtha, jet ~~fuels~~fuels, and fuel oil no. 2, shall be analyzed for volatile organic compounds using EPA Method 8260 and semivolatile organic compounds using EPA Method 8270;
- (3) soil samples collected from a discharge or release of heavy fuels shall be analyzed for semivolatile organic compounds using EPA Method 8270;
- (4) soil samples collected from a discharge or release of used and waste oil shall be analyzed for volatile organic compounds using EPA Method 8260, semivolatile organic compounds using EPA Method 8270, polychlorinated biphenyls using EPA Method 8080, and chromium and ~~lead~~lead using procedures specified in Subparagraph (6) of this Paragraph;
- (5) soil samples collected from ~~any~~a discharge or release subject to this Section shall be analyzed for alkane and aromatic carbon fraction classes using methods approved by the Director under Rule 2H .0805(a)(1) of this Chapter;
- (6) analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph shall be performed as specified in the following references or the most recent version of these references: Test Methods for Evaluating Solid Wastes:Physical/Chemical Methods, November 1990, U.S. Environmental Protection Agency publication number SW-846; or in accordance with other methods or procedures approved by the Director under ~~15A NCAC 2H.0805(a)(1);~~Rule 2H .0805(a)(1) of this Chapter;
- (7) other EPA-approved analytical methods may be used if the methods include the same constituents as the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph and meet the detection limits of the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph; and
- (8) metals and acid extractable organic compounds shall be eliminated from analyses of soil samples collected pursuant to this Section if these compounds are not detected in soil samples collected during the construction of the source area monitoring well required under ~~15A NCAC 02L~~Rule .0405 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(n);
 Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0413 ANALYTICAL PROCEDURES FOR GROUNDWATER SAMPLES

(a) Analytical procedures for groundwater samples required under this Section shall be methods accepted by the US EPA as suitable for determining the presence and concentration of petroleum hydrocarbons for the type of petroleum released.

(b) A sufficient number of groundwater samples, including the most contaminated sample, shall be analyzed as follows in order to determine the risks of the constituents of contamination:

- (1) groundwater samples collected from a discharge or release of low boiling point fuels, ~~including, but not limited to, including~~ gasoline, aviation ~~gasoline~~ gasoline, and gasohol, shall be analyzed for volatile organic ~~compounds~~ compounds, including xylenes, isopropyl ether, and methyl tertiary butyl ether, using Standard Method ~~6210D~~6200B or EPA Methods 601 and ~~602, including xylenes, isopropyl ether and methyl tertiary butyl ether.~~602. Samples shall also be analyzed for ethylene dibromide using EPA Method 504.1 and lead using Standard Method 3030C preparation. 3030C metals preparation, using a 0.45 micron filter, ~~must~~shall be completed within 72 hours of sample collection;
- (2) groundwater samples collected from a discharge or release of high boiling point fuels, ~~including, but not limited to, including~~ kerosene, diesel, varsol, mineral spirits, naphtha, jet ~~fuels~~fuels, and fuel oil no. 2, shall be analyzed for volatile organic compounds using EPA Method 602 and semivolatile organic compounds plus the 10 largest non-target peaks identified using EPA Method 625;
- (3) groundwater samples collected from a discharge or release of heavy fuels shall be analyzed for semivolatile organic compounds plus the 10 largest non-target peaks identified using EPA Method 625;
- (4) groundwater samples collected from a discharge or release of used or waste oil shall be analyzed for volatile organic compounds using Standard Method ~~6210D~~6200B, semivolatile organic compounds plus the 10 largest non-target peaks identified using EPA Method 625, and chromium and lead using Standard Method 3030C preparation. 3030C metals preparation, using a 0.45 micron filter, ~~must~~shall be completed within 72 hours of sample collection;
- (5) groundwater samples collected from ~~any~~ discharge or release subject to this Section shall be analyzed for alkane and aromatic carbon fraction classes using methods approved by the Director under Rule 2H .0805(a)(1) of this Chapter;
- (6) analytical methods specified in Subparagraphs (1), (2), (3) and (4) of this Paragraph shall be performed as specified in the following references or the most recent version of these references: Test Procedures for the Analysis of Pollutants under the Clean Water Act, Federal Register Vol. 49 No. 209, 40 CFR Part 136, October 26, 1984; Standard Methods for the Examination of Water and Wastewater, published jointly by American Public Health Association, American Water Works Association and Water Pollution Control Federation; Methods for Determination of Organic Compounds in Drinking Water, U.S. Environmental Protection Agency publication number EPA-600/4-79-020; or in accordance with other methods or procedures approved by the Director under ~~15A NCAC 2H .0805(a)(1);~~Rule 2H .0805(a)(1) of this Chapter;
- (7) other EPA-approved analytical methods may be used if the methods include the same constituents as the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph and meet the detection limits of the analytical methods specified in Subparagraphs (1), (2), (3), and (4) of this Paragraph; and

- (8) metals and acid extractable organic compounds shall be eliminated from analyses of groundwater samples collected pursuant to this Section if these compounds are not detected in the groundwater sample collected from the source area monitoring well installed pursuant to ~~15A NCAC 02L~~Rule.0405 of this Section.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(o);
 Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0414 REQUIRED LABORATORY CERTIFICATION

In accordance with ~~15A NCAC 02H .0804~~,Rule 2H .0804 of this Chapter, laboratories ~~are required to~~shall obtain North Carolina Division of Water Quality laboratory certification for parameters that are required to be reported to the State in compliance with the State's surface water, ~~groundwater~~groundwater, and pretreatment rules.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(p);
 Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

15A NCAC 02L .0415 DISCHARGES OR RELEASES FROM OTHER SOURCES

This Section shall not relieve any person responsible for assessment or cleanup of contamination from a source other than a commercial or noncommercial underground storage tank from its obligation to assess and clean up contamination resulting from such discharge or releases.

History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94E; 143-215.94T; 143-215.94V; 143B-282; 1995 (Reg. Sess. 1996) c. 648, s. 1;
 Recodified from 15A NCAC 02L .0115(q);
 Amended Eff. December 1, ~~2005-2005~~;
Readopted Eff. XX 1, 20XX.

Poplawski, Jeremy J

From: Hollis, Carrie
Sent: Thursday, November 01, 2018 8:55 AM
To: Poplawski, Jeremy J; Edwards, Jared; Everett, Jennifer
Cc: Masich, Molly; McGhee, Dana; Grozav, Anca
Subject: Review - Noncommercial Underground Storage Tanks, 15A NCAC 02L .0400, .0500
Attachments: DEQ_2018-11-01.pdf

Follow Up Flag: Flag for follow up
Flag Status: Flagged

OSBM has reviewed the Division of Waste Management's proposed amendments to 30 rules in 15A NCAC 02L Sections .0400 and .0500 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. OSBM has determined the amendments have little to no impact on state or local governments and no substantial economic impact. The fiscal note is approved for publication.

Please let me know if you have any questions.

-Carrie

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