STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WASTE MANAGEMENT

REPORT OF PROCEEDINGS OF PUBLIC HEARING AND COMMENT PERIOD

PERMANENT RULE READOPTION WITH AMENDMENTS IN 15A NCAC 2T SECTION .1500: ${\bf SOIL\ REMEDIATION}$

SEPTEMBER 18, 2017 RALEIGH, NORTH CAROLINA

ENVIRONMENTAL MANAGEMENT COMMISSION

CONTENTS

Summaries and Recommendations

- Background and Summary
- Public Comments and Responses Thereto
- Conclusion
- Hearing Officer's Recommendations

Report of Proceedings

- Introduction
- Designation of Hearing Officer Memo
- Public Notice

SUMMARIES AND RECOMMENDATION

Background and Summary

A public hearing was held in Raleigh North Carolina on August 30, 2017, to hear public comments on proposed Readoption of Permanent Rules with Amendments in 15A NCAC 02T Section .1500, to change the closure/cleanup requirements for petroleum-contaminated soil to risk-based closure/cleanup requirements applicable to soil remediation permitting. In total, five UST Section staff members attended the hearing and Ms. Carin Kromm of the UST Section acted as the hearing officer. No members of the public attended the hearing.

The public comment period began on August 15, 2017 and ended on October 16, 2017. The 15A NCAC 02T Section .1500 rules, Notice of Text, Fiscal Note, Public Comment Period dates, and Public Hearing announcement were posted on the DEQ and UST websites on July 31, 2017. The same information was sent via email to a list of potentially interested recipients on August 2, 2017. The proposed rules with amendments in 15A NCAC 02T Section .1500 were published in the North Carolina Register on August 15, 2017.

The remediation of petroleum-contaminated soil removed from a source area is treated and remediated in a Permitted Soil Remediation Facility regulated under 15A NCAC 02T Section .1500. The contaminated soil currently requires remediation to below detection limits, which is a laboratory analysis-based limit. However, as technology advances, the detection limits have decreased to unreasonable levels. Therefore, the proposed rule only requires soil remediation to the soil-to-groundwater or residential Maximum Soil Contaminant concentrations (MSCCs), whichever are lower. The proposed levels are protective of groundwater quality and human health and the environment to avoid extensive and expensive analysis-based limits.

Public Comments and Responses Thereto

There were no comments received during the comment period and there is no transcript of the public hearing as there were not any members of the public in attendance.

Conclusion

There were no comments during the public hearing or otherwise during the 60-day comment period. Therefore, no changes to the proposed rule are recommended.

Hearing Officer's Recommendations

The Hearing Officer recommends that the proposed rule presented in the hearing report be adopted by the Environmental Management Commission.

REPORT OF PROCEEDINGS

Introduction

The Department of Environmental Quality, Division of Waste Management, held a public hearing on August 30, 2017 at 1:00 p.m. in the Training Room #1210, Green Square Building located at 217 West Jones Street in Raleigh, North Carolina.

The hearing considered the proposed permanent rule readoption with amendments in 15A NCAC 2T .1500. The proposed effective date for the rule changes is January 1, 2018. A public notice announcing this hearing was posted to the DWM website on July 31, 2017 at least 30 days from the public hearing.

Designation of Hearing Officer Memo



ENVIRONMENTAL MANAGEMENT COMMISSION

John D. Solomon Chairman Julie A. Wilsey Vice Chairman

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

Roy Cooper, Governor Michael S. Regan, Secretary David W. Anderson Gerard P. Carroll Charles Carter Marion Deerhake Charles B. Elam Mitch Gillespie Steve Keen Dr. Suzanne Lazorick Dr. Stan Meiburg Manning Puette Dr. Albert R. Rubin Clyde E. Smith, Jr. Richard Whisnant

July 19, 2017

MEMORANDUM

To: Carin Kromm

Division of Waste Management/UST Section

From: John D. Solomon

Chairman of Environmental Management Commission

Subject: Hearing Officer Appointment

A public hearing has been scheduled for Wednesday, August 30, 2017 at 2:00 p.m. in the Green Square Building Training Room #1210, 217 West Jones Street in Raleigh. The purpose of this hearing is to gather comments on proposed amendments and readoption for 15A NCAC 02T Section .1500.

I am hereby appointing you to serve as hearing officer for this hearing. Please receive all relevant public comment and report your findings and recommendations to the Environmental Management Commission. Mr. Jeremy Poplawski will provide staff support for you.

If you have any questions, please feel free to contact Jeremy Poplawski at (919) 707-8151.

JDS/lct

Attachment

cc: Lois Thomas Jeremy Poplawski Hearing Record

State of North Carolina | Environmental Quality

1611 Mail Service Center | Raleigh, North Carolina 27699-1611

919-707-9023

Public Notice



CHECK APPROPRIATE BOX:

NOTICE OF TEXT [Authority G.S. 150B-21.2(c)]

OAH USE ONLY 7/25

VOLUME:

ISSUE:

| Notice with a scheduled hearing Notice without a scheduled hearing Republication of text. Complete the following cite for the volume and issue of previous p blocks 1 - 4 and 7 - 13. If a hearing is scheduled, complete block 5. Previous publication of text was published in Volume: Issue: | ublicati | ion, as v | vell as |
|--|-------------------|-----------|---------|
| 1. Rule-Making Agency: Environmental Management Commission | | | |
| 2. Link to agency website pursuant to G.S. 150B-19.1(c): http://deq.nc.gov/about/divisons/waste-mana | gement | /ust/wh: | ats-new |
| 3. Proposed Action Check the appropriate box(es) and list <u>rule citation(s)</u> beside proposed action ADOPTION: | 1: | | |
| READOPTION with substantive changes: 15A NCAC 02T .1502, .1505, and .1507 | OFFICE OF | 2017 JUL | п |
| READOPTION without substantive changes: 15A NCAC 02T .1501, .1503, .1504, and .1506 | OF ADMIN HEARINGS | 25 PM | |
| AMENDMENT: | ARINGS | 3: 32 | |
| REPEAL: | | | |
| 4. Proposed effective date: January 1, 2018 | | | |
| If yes: Public Hearing date: August 30, 2017 Public Hearing time: 2:00 pm Public Hearing Location: Green Square Building, Room 1210 217 West Jones Street Raleigh, NC 27603 If no public hearing is scheduled, provide instructions on how to demand a public hearing: N/A | | 1. | |
| | | | |

| indicating that, for closure of a soil remediation permitted is contamination is unreasonable. The DWM concurs that it is | of Waste Management (DWM) received a request from stakeholders facility, having a closure/cleanup based on a non-detection level of soil is more reasonable to use risk based levels that are protective of avoid extensive and expensive analyses based on non-detection levels. |
|--|--|
| rule, a person may also submit written objections to the Rule and signed objections in accordance with G.S. 150B-21.3(I and the Rules Review Commission approves the rule, the Commission will receive written objections until 5:00 p.m. Commission will receive those objections by mail, delivery | tive Review: If an objection is not resolved prior to the adoption of the sex Review Commission. If the Rules Review Commission receives written (b2) from 10 or more persons clearly requesting review by the legislature are rule will become effective as provided in G.S. 150B-21.3(b1). The a. on the day following the day the Commission approves the rule. The service, hand delivery, or facsimile transmission. If you have any further formmission, please call a Commission staff attorney at 919-431-3000. Cite statutory reference: |
| 9. The person to whom written comments may be submi | tted on the proposed rule(s): |
| Name: Jeremy Poplawski Address: NCDEQ/DWM/UST Section | |
| 1646 Mail Service Center | |
| Raleigh, NC 27699-1646 | |
| Phone (optional): 919-707-8151 | |
| Fax (optional): 919-715-1117 | |
| E-Mail (optional): Jeremy.poplawski@ncdenr.gov | |
| 10. Comment Period Ends: October 16, 2017 | |
| 11. Fiscal impact (check all that apply). If this form contains rules that have different fiscal in | mpacts, list the rule citations beside the appropriate impact. |
| State funds affected Environmental permitting of DOT affected Analysis submitted to Board of Transportat Local funds affected Substantial economic impact (≥\$1,000,000) Approved by OSBM No fiscal note required by G.S. 150B-21.4 No fiscal note required by G.S. 150B-21.3A(a) | |
| 12. Rule-making Coordinator: Jennifer Everett | 13. The Agency formally proposed the text of this rule(s) on Date: July 13, 2017 |
| Address: 1601 Mail Service Center Raleigh, NC 27699-1601 | 14. Signature of Agency Head* or Rule-making Coordinator: |
| Phone: 919-707-8614 | *If this function has been delegated (reassigned) pursuant to |
| E-Mail: Jennifer.everett@ncdenr.gov | G.S. 143B-10(a), submit a copy of the delegation with this form. |
| Agency contact, if any: Jeremy Poplawski | Typed Name: Jennifer Everett |
| Phone: 919-707-8151 | Title: Rulemaking Coordinator |
| E-mail: Jeremy.poplawski@ncdenr.gov | |
| | |

Notice is hereby given in accordance with G.S. 150B-21.2 and G.S. 150B-21.3A(c)(2)g. that the Environmental Management Commission intends to readopt with substantive changes the rules cited as 15A NCAC 02T .1502, .1505, .1507 and readopt without substantive changes the rules cited as 15A NCAC 02T .1501, .1503, .1504 and .1506.

Pursuant to G.S. 150B-21.2(c)(1), the text of the rule(s) proposed for readoption without substantive changes are not required to be published. The text of the rules are available on the OAH website: http://reports.oah.state.nc.us/ncac.asp.

Link to agency website pursuant to G.S. 150B-19.1(c): http://deq.nc.gov/about/divisions/waste-management/ust/whats-new

Proposed Effective Date: January 1, 2018

Public Hearing: Date: August 30, 2017 Time: 2:00 p.m.

Location: Green Square Building, Room 1210, 217 West Jones Street, Raleigh, NC 27603

Reason for Proposed Action: The Division of Waste Management (DWM) received a request from stakeholders indicating that, for closure of a soil remediation permitted facility, having a closure/cleanup based on a non-detection level of soil contamination is unreasonable. The DWM concurs that it is more reasonable to use risk based levels that are protective of groundwater quality human health, and the environment to avoid extensive and expensive analyses based on non-detection levels.

Comments may be submitted to: *Jeremy Poplawski, NCDEQ/DWM/UST Section, 1646 Mail Service Center, Raleigh, NC 27699-1646; phone (919) 707-8151; fax (919) 715-1117; email Jeremy.poplawski@ncdenr.gov*

Comment period ends: October 16, 2017

Procedure for Subjecting a Proposed Rule to Legislative Review: If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission after the adoption of the Rule. If the Rules Review Commission receives written and signed objections after the adoption of the Rule in accordance with G.S. 150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-431-3000.

| Fiscal i | mpact (check all that apply). |
|-------------|--|
| \boxtimes | State funds affected |
| | Environmental permitting of DOT affected |
| | Analysis submitted to Board of Transportation |
| | Local funds affected |
| | Substantial economic impact (≥\$1,000,000) |
| \boxtimes | Approved by OSBM |
| | No fiscal note required by G.S. 150B-21.4 |
| | No fiscal note required by G.S. 150B-21.3A(d)(2) |

CHAPTER 02 - ENVIRONMENTAL MANAGEMENT

SUBCHAPTER 02T - WASTE NOT DISCHARGED TO SURFACE WATERS

SECTION .1500 - SOIL REMEDIATION

15A NCAC 02T .1501 SCOPE (READOPTION WITHOUT SUBSTANTIVE CHANGES)

15A NCAC 02T .1502 DEFINITIONS

The following definitions apply to this Section:

- (1) "Contaminated soil" means soil containing petroleum products or other soil that has been affected by non-petroleum substances as a result of a release or discharge, but does not include hazardous waste.
- (2) "Dedicated site" means a site used for the repetitive treatment of soils.
- (3) "Permitting agency" means the Division of Waste Management, UST Section, for contaminated soils originating from underground storage tanks (USTs) and for dedicated sites. For other soil, the permitting agency means the Division of Water Quality Resources. When the permitting agency is the Division of Waste Management, the Division of Waste Management shall be considered the Division for the purposes of Section .0100 of this Subchapter.

- (4) "Petroleum contaminated soil" or "Soil containing petroleum products" shall mean any soil that has been exposed to petroleum products because of any emission, spillage, leakage, pumping, pouring, emptying, or dumping of petroleum products onto or beneath the land surface and that exhibits characteristics or concentrations of petroleum product constituents in sufficient quantities that exceed either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to 15A NCAC 02L .0411, whichever is lower as to be detectable by compatible laboratory analytical procedures pursuant to 15A NCAC 02H .0800.
- (5) "Petroleum product" means all petroleum products as defined by G.S. 143-215.94A and includes motor gasoline, aviation gasoline, gasohol, jet fuels, kerosene, diesel fuel, fuel oils (#1 through #6), and motor oils (new and used).
- (6) "Soil remediation at conventional rates" means the treatment of contaminated soils by land application methods, at an evenly distributed thickness not to exceed six inches.
- (7) "Soil remediation at minimum rates" means the treatment of contaminated soils by land application methods, at an evenly distributed application thickness not to exceed an average of one inch.

Authority G.S. 143-215.1; 143-215.3(a).

15A NCAC 02T .1503 PERMITTING BY REGULATION (READOPTION WITHOUT SUBSTANTIVE CHANGES)

15A NCAC 02T .1504 APPLICATION SUBMITTAL (READOPTION WITHOUT SUBSTANTIVE CHANGES)

15A NCAC 02T .1505 DESIGN CRITERIA

- (a) Land Application of Soils Containing Petroleum Products at Minimum Rates. Petroleum contaminated soils shall be incorporated into the native soils of the receiver site immediately upon application. Liming, fertilization, and aeration of the soils mixture shall be optional. Subsequent application of petroleum contaminated soils onto the same receiver site shall not occur for at least 18 months from the date of the most recent application of petroleum contaminated soils and shall cause the receiver site to be reclassified as a "dedicated site" unless the permittee or applicant can demonstrate, through soil sampling and contaminant analytical procedures pursuant to 15A NCAC 02H .0800, that the petroleum contaminant level in the upper eight inches of the receiver site soils is below either the "soil-togroundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to 15A NCAC 02L .0411, whichever is lower. analytical detection levels.
- (b) Land Application of Soil Containing Petroleum Products at Conventional Rates. Land application of soils containing petroleum products at an application thickness greater than one inch shall require fertilization, liming, and aeration of the native soils and petroleum contaminated soils mixture. Application thickness shall be based upon the nature of the receiver site soils, depth to the seasonal high water table, the intended cover crop, and the source of contamination. Operation of the land application program shall not result in contravention of groundwater or surface water standards. Subsequent application of petroleum contaminated soils onto the same receiver site shall not occur for at least 18 months from the date of the most recent application of petroleum contaminated soils and shall cause the receiver site to be reclassified as a "dedicated site" unless the permittee or applicant can demonstrate, through soil sampling and contaminant analytical procedures pursuant to 15A NCAC 02H .0800, that the petroleum contaminant level in the upper eight inches of the receiver site soils is below either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to 15A NCAC 02L .0411, whichever is lower. analytical detection levels.
- (c) Disposal of Soils Containing Petroleum Products at Dedicated Land Application Sites. Subsequent applications of petroleum contaminated soils at dedicated sites shall not recur until such time as it can be demonstrated that additional applications of contaminated soils will not result in the contravention of any groundwater or surface water standards.
- (d) Containment and Treatment and Containment and Utilization of Contaminated Soil.
 - (1) A containment structure designed to bioremediate or volatilize contaminated soil shall be constructed of either a synthetic liner of at least 30 mils thickness or of a one foot thick liner of natural material, compacted to at least 95 percent standard proctor dry density and with a permeability of less than 1 x 10⁻⁷ cm/sec.
 - (2) The bottom of the containment structure shall be at least three feet above the seasonal high water table or bedrock.
 - (3) A leachate collection system must shall be installed in order to prevent runoff from the contaminated soils within the containment structure, or a cover provided to avoid accumulation of stormwater within the containment structure.
 - (4) The containment structure shall be compatible with the chemical and physical properties of the contaminants involved.

Authority G.S. 143-215.1; 143-215.3(a).

15A NCAC 02T .1506 SETBACKS (READOPTION WITHOUT SUBSTANTIVE CHANGES)

15A NCAC 02T .1507 CLOSURE REQUIREMENTS

- (a) A permit must shall be held and renewed if necessary until such time that the soil remediation facility has satisfied all conditions for closure and the permitting agency has notified the permit holder that the facility has satisfied conditions necessary for closure and rescinded the permit. The permittee must shall notify the permitting agency 30 days prior to the initiation of closure activities. This Rule does not apply to deemed permitted facilities as described in Rule .1503 of this Section.
- (b) A facility may be considered for closure once all of the following conditions have been satisfied:
 - (1) Any and all outstanding enforcement actions levied by the permitting agency have been resolved.
 - (2) Requirements for all other related on-site permitted activities have been met.
 - (3) For all land application sites the applicant shall provide to the permitting agency:
 - (A) Demonstration that no contaminant constituents in the groundwater exceed groundwater standards for dedicated and conventional rate land application sites.

- C12
 Demonstration that all remaining contaminated soil has been remediated to below either the "soil-to-(B) groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to 15A NCAC 02L .0411, whichever is lower. detection levels. The demonstration shall be based upon representative samples from the permitted site.
- (C) If a groundwater drainage system or surface waters are present on the site or within the compliance boundary, a demonstration that surface water has not been impacted by contaminants at concentrations in excess of those established in Subchapter 15A NCAC 02B.
- (4) For facilities utilizing containment and treatment or portable self-contained treatment systems.
 - Demonstration by the applicant to the permitting agency that all treated soil has been remediated to below either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to 15A NCAC 02L .0411, whichever is lower detection levels. based upon analysis of representative soil samples or is disposed of under Subparagraph (b)(4)(B) of this Rule.
 - (B) All remaining soil that contains contaminants at levels that exceed either the "soil-to-groundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to 15A NCAC 02L .0411, whichever is lower the method detection levels. must shall be disposed of at another permitted facility and the permitting agency must shall be notified prior to transport.
 - (C) Demonstration by the applicant to the permitting agency that the facility has been decontaminated based upon analysis of samples.
- (5) For storage facilities, a demonstration that the storage facility has been decontaminated to below either the "soil-togroundwater" or the residential maximum soil contaminant concentrations established by the Department pursuant to 15A NCAC 02L .0411, whichever is lower detection levels shall be submitted by the permittee to the Division. The demonstration shall be based upon analysis of pollutants identified in the contaminated soil as provided in Rule .1504(a)(1) of this Section.
- (c) A facility that satisfies the conditions for closure may petition the permitting agency for closure status approval and shall provide the following information:
 - identification of the original permit authorizing the construction and operation of the soil remediation facility; (1)
 - (2) the reason(s) for closure of facility;
 - (3) the name and title of the contact;
 - (4) sample analyses (tabulated and graphed) for the last four groundwater sampling events prior to facility shutdown showing the concentrations of the parameters of concern and if groundwater monitoring is required at a land application site, groundwater analytical results for sample collection to satisfy Part (b)(3)(A) of this Rule; Rule .1507(b)(3)(A);
 - (5) laboratory analytical results for soil samples collected from the treated soil, which have been analyzed by methods approved in accordance with Rule .1504(a)(1) of this Section;
 - (6) if a groundwater drainage network (ditches) or surface waters are present on the site or within the compliance boundary, analytical results for surface water samples collected upstream of the facility, within the facility if applicable, and at a downstream location at the edge of the property to document that surface waters have not been impacted;
 - (7) decontamination procedures for any treatment or containment structure;
 - (8) a sedimentation and erosion control plan, prepared in accordance with the Division of Energy, Mineral, and Land Resources requirements pursuant to Subchapter 15A NCAC 04B, if a plan to restore the site to pre-soil treatment conditions is proposed that will disturb an area of land equal to or greater than one acre;
 - (9) a map of the facility facility, which that shows the size, orientation, and location of the facility relative to existing monitor wells, roads, structures, and other site features; and
 - (10)certification that the closure has been accomplished and that the information submitted is complete, factual and
- (d) Once the permitting agency has determined that all conditions required for site closure have been satisfied, the permitting agency shall issue a notice stating that the permit for the facility has been rescinded and "closure status" has been granted.

Authority G.S. 143-215.1; 143-215.3(a).