

## **Hearing Officer's Report for Geophysical Exploration Rules Readoption**

To: North Carolina Oil and Gas Commission

Agency Contact: Jim Chapman, PG, Senior Geologist  
NC Geological Survey  
Division of Energy, Mineral, and Land Resources  
NC Department of Environmental Quality

Hearing Officer: Commissioner William Vizuite, Ph.D.

Date: March 31, 2025

Subject: Hearing Officer's Report and Recommendations  
Geophysical Exploration Rules Readoption 15A NCAC 05C .0101, .0103-.0113, .0115-.0121, and .0123-.0126

Commissioner William Vizuite, Ph.D. served as the Hearing Officer for the Public Hearing held on January 7, 2025, concerning the readoption of the Geophysical Exploration rules at 15A NCAC 05C. The Oil and Gas Commission ("Commission") is directed by N.C. Stat. § 113-391(a) to adopt rules regulating pre-drilling exploration activities, including geophysical surveys, stratigraphic surveys, and testing. The rules in 15A NCAC 05C establish the procedures related to pre-drilling for oil and natural gas exploration activities, including seismic and other geophysical and stratigraphic surveys and testing as required in N.C. Gen. Stat. § 113-391.

In preparing this Hearing Officer's Report and Recommendations, staff to the Commission and the Hearing Officer have reviewed all of the public comments and the public record.

The report has been prepared using the following outline:

- I. History / Background
- II. Public Hearing Summary
- III. General Comments
  - A. Comments on 15A NCAC 05C .0104
  - B. Comments on 15A NCAC 05C .0106
  - C. Comments on 15A NCAC 05C .0110
  - D. Comments on 15A NCAC 05C .0118
  - E. Comments on 15A NCAC 05C .0121
  - F. Comments on 15A NCAC 05C .0123 and .0124
  - G. Other Comments Received
- IV. Recommendations
- V. Appendices

## I. History / Background

As required by N.C. Gen. Stat. § 150B-21.3A, state agencies are to review existing rules every 10 years by adherence to the following criteria: (1) conduct an analysis of each existing rule and make an initial determination as to whether the rule is necessary or unnecessary; (2) allow for a public comment period; and (3) agency consultation with the Joint Legislative Administrative Procedure Oversight Committee. The Commission is considered an agency as defined by N.C. Gen. Stat. § 150B-2(1b) and therefore is subject to the periodic review requirements at N.C. Gen. Stat. § 150B-21.3A. The proposed rulemaking for 15A NCAC 05C falls within this purview. In preparation for that re adoption, a Regulatory Impact Analysis (“RIA”) was prepared. The RIA considered the necessity for the rule change, the purpose of the rules, assessed the regulatory baseline for comparison purposes, and performed an environmental and economic impact analysis. The RIA concluded that the proposed rules have a minor impact on state government but no substantial impact on local governments, industry, or the environment.

The Notice of Text (Attachment A) containing the proposed revised rules was published in the North Carolina Register on December 16, 2024 (Volume 39, Issue 12). The Notice of Text and the Regulatory Impact Analysis are attached to this report as Appendix A. The public comment period occurred from December 16, 2024, to February 14, 2025. In addition, NCDEQ issued a press release on January 2, 2025, announcing the public comment period as well as the public hearing. A Public Hearing was held on January 7, 2025.

The proposed amendments to the subject rules are primarily technical, aimed at enhancing clarity by updating agency names, modernizing application procedures and exploration methods, and ensuring consistency with other current DEQ rules. Of the 26 rules in the proposed rulemaking, eleven are proposed for re adoption with minor changes for clarity and consistency, twelve are proposed for re adoption with more substantial changes, and three are proposed for repeal. The rules proposed for repeal are either unnecessary based on current Department practice or unnecessary due to other North Carolina laws.

## II. Public Hearing Summary

A public hearing was held on January 7, 2025, at 6:00 p.m., although no members of the public attended the hearing. The audio recording of the public hearing is available upon request to the Department. A transcript of the hearing is attached as Attachment B.

## III. General Comments

NCDEQ received no oral public comments and five written public comment. Written comments will be addressed in the order in which they were received.

### **Written Comments**

Five commentators submitted comments, which are attached as Attachment C. Staff have condensed the comments to specific proposed rules and responded to the comments below. Staff's recommendations in response to the public comments are included below for the Commission's consideration.

**A. Comments on 15A NCAC 05C .0104**

Two commentators objected to the revision to 15A NCAC 05C .0104 to remove the mandatory approval of the Director of the N.C. Wildlife Resources Commission ("NCWRC") and representatives of the U.S. Fish and Wildlife Service ("USFWS").

One commentator argued that the removal of the requirement for approval by the NCWRC and USFWS will reduce the protections that regulations are written to ensure. And further, the commentator argues that the input of the aforementioned agencies was seen as warranted when this section of the rules was last readopted. One commentator questioned whether requiring advice, rather than the approval, of the NCWRC and the USFWS is enough to ensure protection for fish and wildlife. The commentator argues that approval is necessary as these agencies' expertise enables them to review and make determinations to approve/modify plans that are more protective. Finally, one commentator is concerned that the currently effective rule included the mandatory approval of the two aforementioned agencies for a reason and speculates that the risk to wildlife is worse now than when the rule was adopted. Both commentators would like to retain the language requiring the approval of non-permitting agencies.

**Staff Response to Comments on 15A NCAC 05C .0104**

*Staff note that the proposed rule language requires that NCDEQ seek the advice of NCWRC and USFWS about the extent of exploration work that may be conducted. While some oil and gas producing states require the state's wildlife agency to approve geophysical exploration on privately owned lands, in many cases, the state's wildlife agency already oversees the permitting of geophysical exploration activities. For example, Louisiana follows this scheme. However, all the geophysical exploration activities in North Carolina are permitted and regulated by the NCDEQ, rather than the NCWRC. For privately owned lands, the mandatory approval of the USFWS is even less frequently found among other oil and gas producing states.*

*Staff also note that there have been significant improvements in blasting technology since these rules were originally adopted, which should reduce the risk to wildlife. When the 15A NCAC 05C ruleset was established, the use of explosive charges were more commonly used than at present to create seismic pressure waves. Although explosive charges are still used on occasion in the industry, advances in explosive chemistry have led to the development of more controlled and predictable explosives, reducing unintended environmental impacts. One of these methods, emulsion-based explosives (e.g., water-gel explosives), have largely replaced traditional dynamite, allowing for better control and reduced environmental risks. Other advances include: (1) Electronic Blasting Systems (EBS), which allow for precise control over timing and sequencing of explosions, reducing ground vibrations and (2) Programmable Delay Detonators (PDDs) which are programmed to fire at specific millisecond intervals, optimizing energy use and minimizing*

*damage to surrounding areas. Due to these advances in blasting technology, the risk to wildlife is less than the risk to wildlife when the original ruleset was created. Regardless, the advice of NCWRC and USFWS will still be sought as part of the approval process in these proposed rules.*

*Staff Recommendation in Response to Comments on 15A NCAC 05C .0104*

*Staff recommend retaining the revised version of this rule as proposed in the Notice of Text.*

**B. Comments on 15A NCAC 05C .0106**

One commentator submitted on a comment on the proposed change in time period for the agency's review of a permit application. The comment indicated support of the increase of the time period for agency review but questioned whether the proposed revised permit review period of 30 business days is adequate to provide the necessary review to ensure protection of the public's resources.

*Staff Responses to Comment on 15A NCAC 05C .0106*

*Staff believe that the revised time for review in the proposed rule is in alignment with other oil and gas producing states and believes that the revised time period should be sufficient for review of permit application materials. Although certain oil and gas producing states do allow for longer permitting decision periods, e.g. Pennsylvania, which allows for 45 days, the states that do allow for the longer periods manage a more robust oil and gas production inventory. Thirty business days is a common time allowed for review of permit application in oil and gas producing states, i.e. Oklahoma, Texas, and West Virginia. Within the southeast region of the U.S., it is common for states to offer an even shorter time period, i.e. Tennessee, which requires a review process of fifteen days. Thus, staff believe that the time allotted in the proposed rule aligns with other states' requirements and is sufficient.*

*Staff Recommendation in Response to Comments on 15A NCAC 05C .0106*

*Staff recommend retaining the revised version of this rule as proposed in the Notice of Text.*

**C. Comments on 15A NCAC 05C .0110**

Three comments were received on proposed revisions to 15A NCAC 05C .0110. All three commentators raised concerns about how the public would have access to daily reports submitted to the Department. One commentator argues that the proposed revision allowing informal email submittals are unacceptable, as it will weaken the agency's, and the public's, ability to monitor ongoing activity, and suggested that there must be minimum parameters and descriptions required. The same commentator suggested that all reports be logged and available online to both agency staff and the public.

*Staff Response to Comments on 15A NCAC 05C .0110*

*Staff note that the proposed rule states that "[t]he permittee shall file a daily report on exploration work with the Department at the end of each working day. A separate report shall be made for each day whether or not data acquisition is in progress. The Department may request additional information." However, the current rule specifies that, "[t]hese reports must furnish complete*

*information as indicated on the report form and must be signed by the party chief and by the seismic agent. The party chief will furnish only such information to the seismic agent as is required to fill out the daily reports.”*

*Staff believe that the daily reports, even in the text of an email, should be easily made accessible in an online public-facing portal. Staff believe that the formality of a form is unnecessary to accomplish the goals of this permitting program and suggest that the Department provide guidance to permittees about the contents of daily reports.*

*Staff Recommendation in Response to Comments on 15A NCAC 05C .0110*

*Staff recommend retaining the revised version of this rule as proposed in the Notice of Text.*

**D. Comments on 15A NCAC 05C .0118**

Three comments were received on proposed revisions to 15A NCAC 05C .0118. One commentator supported the safety requirement that blasting be at least 1,000 feet from any boat.

All three commentators indicated that they were concerned about the impact of the proposed revisions to 15A NCAC 05C .0104 (removing the mandatory approval of NCWRC and USFWS) and how that revision could result in unnecessary killing of fish and marine life. One commentator is concerned that the proposed revision to the rule: (1) removes the need for the exploration party to employ methods approved by the industry to drive away fish and marine life that may be in the area where an explosive is to be discharged and (2) removes the requirement to suspend operations in the area until all schools of fish have been driven away. The same commentator suggests that there are now more advanced techniques to easily and effectively assure removal of fish and aquatic animals than what was available when the rule was originally adopted. Finally, the commentator objects to the description in the Regulatory Impact Analysis which describes suspension of all operations until the area is cleared of all schools of fish as an overly burdensome requirement. Similarly, another commentator argues that even though safety concern for freely mobile aquatic life may be an overly burdensome requirement for industry, the current rule requirements should be retained.

*Staff Response to Comments on 15A NCAC 05C .0118*

*First, staff note that concerns about the impact of proposed revisions to 15A NCAC 05C .0104 have been addressed above. Staff note that there is redundancy in the 05C rules that there is an attempt to address through the revisions to this rule. Specifically, 15A NCAC 05C .0126 in its proposed form states, “All permittees conducting seismic operations shall use precaution in accordance with approved and accepted methods to prevent destruction of, or injury to, fish, oysters, shrimp, and other aquatic life, wildlife, or other natural resources.” While staff acknowledge the commentator’s request that all operations be suspended until the area is cleared of all schools of fish, staff note that there are no known methods of ensuring complete temporary clearance of all schools of fish from a designated area, beyond the approved and accepted methods*

*for reasonable efforts. Staff also note that reasonable attempts at removal are a part of approved and accepted methods.*

*Staff Recommendation in Response to Comments on 15A NCAC 05C .0118*

*Staff recommend retaining the revised version of this rule as proposed in the Notice of Text.*

**E. Comments on 15A NCAC 05C .0121**

The commentator argues that reliance on self-reporting may be prone to error if biased or entered incorrectly, and that regulations may be misunderstood by a seismic agent with limited experience or unfamiliarity with North Carolina regulations.

*Staff Response and Recommendation in Response to Comment on 15A NCAC 05C .0121*

*Staff believe that the commentator may not be considering the entire 15A NCAC 05C ruleset; as defined in the revised version of 15A NCAC 05C .0101(e), “Seismic agent” means a North Carolina Department of Environmental Quality representative who shall be responsible for observing and monitoring compliance with the rules and regulations of the Department and the issued permit for geophysical operations.” Self-reporting is not a consideration. Therefore, my recommendation is to retain the revised version of this rule as proposed in the Notice of Text.*

**F. Comments on 15A NCAC 05C .0123 and .0124**

One commentator would like the Department to consider changing references to “he or she”. The proposed 15A NCAC 05C .0123 and 15A NCAC 05C .0124 rules changes make a reference to the seismic agent as “he or she”. The commentator proposes that the reference to those personnel be “the seismic agent,” in order to not make unnecessary references to gender.

*Staff Response and Recommendations in Response to Comments on 15A NCAC 05C .0123 and .0124*

*Staff appreciate the public’s participation regarding these rules. Staff recommend revising the proposed rule in both .0123 and .0124 to use the phrase “the seismic agent(s)” rather than “he or she” as it currently reads in the proposed rules edits.*

**G. Other Comments Received**

Two members of the public submitted comments that were unrelated to specific rules or proposed revisions within the Notice of Text. One commentator addressed an unnamed pipeline expansion in North Carolina. One commentator suggested a moratorium on all geophysical exploration for oil and gas.

*Staff Responses and Recommendations to Other Comments Received*

*Staff appreciate the public’s participation, but these comments did not address the 15A NCAC 05C ruleset. Therefore, staff do not have a recommendation for changes to the proposed rules in response to these comments.*

#### IV. Recommendations

Based on review of the public comments, the North Carolina General Statutes, and the North Carolina Administrative Code, staff recommend that 15A NCAC 05C be readopted as set forth in the Notice of Text, with the following exceptions:

- 15A NCAC 05C .0123 and 15A NCAC 05C .0124 change references of “he or she” to “the seismic agent.”

#### V. Attachments

- A. Notice of Text 15A NCAC 05C and Regulatory Impact Analysis
- B. Public Hearing Transcript
- C. Written Public Comments
- D. Hearing Officer’s Proposed Revisions to 15A NCAC 05C

# Appendices



**A. Notice of Text 15A NCAC 05C and Regulatory Impact Analysis**

## TITLE 15A – DEPARTMENT OF ENVIRONMENTAL QUALITY

*Notice* is hereby given in accordance with G.S. 150B-21.3A(c)(2)g. that the Oil and Gas Commission intends to readopt with substantive changes the rules cited as 15A NCAC 05C .0101, .0103-.0113, .0115-.0121 and .0123-.0126.

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

**Proposed Effective Date:** September 1, 2025

**Public Hearing:**

**Date:** January 7, 2025

**Time:** 6:00 p.m.

**Location:** Archdale Bldg. Ground Floor Hearing Room, 512 N. Salisbury St., Raleigh, NC 27604

**Reason for Proposed Action:** The Oil and Gas Commission, created by N.C. Gen. Stat. § 143B-293.1, administers the Oil and Gas Conservation Act, Article 27 of Chapter 113 of the General Statutes. The Commission is responsible for establishing a modern regulatory program for the management of oil and gas exploration and development of the State and the use of horizontal drilling and hydraulic fracturing. The Commission manages the oil and gas development program through regulations designed to protect public health and safety; protect public and private property; protect and conserve the State's air, water, and other natural resources; promote economic development and expand employment opportunities. The Department of Environmental Quality is tasked with administering and enforcing rules adopted by the Commission in accordance with N.C. Gen. Stat. § 113-391(a4).

N.C. Gen. Stat. § 150B-21.3A requires state agencies to review existing rules every 10 years. The Commission is considered an agency as defined by N.C. Gen. Stat. § 150B-2(1b) and therefore is subject to the periodic review requirements at N.C. Gen. Stat. § 150B-21.3A. The proposed rulemaking for 15A NCAC 05C falls within this purview.

The Oil and Gas Commission is directed by N.C. Gen. Stat. § 113-391(a) to adopt rules regulating pre-drilling exploration activities, including geophysical surveys, stratigraphic surveys, and testing. The rules in 15A NCAC 05C establish the procedures related to pre-drilling for oil and natural gas exploration activities, including seismic and other geophysical and stratigraphic surveys and testing as required in N.C. Gen. Stat. § 113-391.

**Comments may be submitted to:** Jim Chapman, Division of Energy, Mineral and Land Resources, Archdale Building, 1612 Mail Service Center, Raleigh, NC 27699-1612; phone (919) 707-9231; email [james.chapman@deq.nc.gov](mailto:james.chapman@deq.nc.gov)

**Comment period ends:** February 14, 2025

**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 a written objection to the Rules Review Commission. 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 letters via U.S. Mail, private courier service, or hand delivery to 1711 New Hope Church Road, Raleigh, North Carolina, or via email to [oah.rules@oah.nc.gov](mailto:oah.rules@oah.nc.gov). If you have any further questions concerning the submission of objections to the Commission, please review 26 NCAC 05 .0110 or call a Commission staff attorney at 984-236-1850.

**Fiscal impact. Does any rule or combination of rules in this notice create an economic impact? Check all that apply.**

- ☒ State funds affected
- ☐ Local funds affected
- ☐ Substantial economic impact ( $\geq$  \$1,000,000)
- ☒ Approved by OSBM
- ☐ No fiscal note required

### CHAPTER 05 - MINING - MINERAL RESOURCES

#### SUBCHAPTER 05C - GEOPHYSICAL EXPLORATION

##### 15A NCAC 05C .0101 DEFINITIONS

~~(d)(a) Department.~~ "Department" Whenever the word "department" is referred to in these rules, it shall mean means the North Carolina Department of Environment, Health, and Natural Resources Environmental Quality in Raleigh, North Carolina.

~~(a)(b) "Explorations"~~ Explorations. Whenever the word "explorations" is referred to in these rules, it shall mean means geological, geophysical and other surveys and investigations, including seismic methods for the discovery and location of oil, gas or other mineral prospects, and which may or may not involve the use of explosives.

~~(c) "Party chief"~~ means the leader of the on-site crew conducting the exploration work for a company that is permitted to conduct such work under these rules.

~~(d) "Secretary"~~ means Secretary of the Department of Environmental Quality.

- (e) "Seismic agent" means a North Carolina Department of Environmental Quality representative who shall be responsible for observing and monitoring compliance with the rules and regulations of the Department and the issued permit for geophysical operations.
- (b)(f) Seismic Explorations. "Seismic explorations" ~~The word "seismic explorations" shall mean~~ means any geophysical exploration method ~~which involves~~ involving the use of explosives. ~~explosives and shall include the seismic vibrator method.~~
- (g) "Seismic vibrator method" means a vibrator device used as an energy source to generate a controlled acoustic wave train.
- (h) "Shooting component" means one explosive charge.
- ~~(e)(i) Shot. "Shot" The word "shot" as used in these rules shall mean~~ means the use and detonation of TNT, powder, dynamite, nitroglycerin ~~nitroglycerin~~, each use of the seismic vibrator method, or other explosives.

History Note: Authority G.S. 113-391;  
Eff. February 1, 1976;  
Amended Eff. January 31, 1979;  
Readopted Eff. August 1, 1982;  
Amended Eff. April 1, 1990;  
Readopted Eff.

#### **15A NCAC 05C .0103 CORRESPONDENCE**

Reports and correspondence by all parties in connection with these rules shall be addressed to "North Carolina Department of ~~Environment, Health, and Natural Resources,~~ Environmental Quality" in Raleigh, N.C." unless ~~from time to time~~ parties subject to these rules shall be notified in writing by the ~~department~~ Department to direct communications to a specified division or a specified representative of the ~~department~~ Department.

History Note: Authority G.S. 113-391;  
Eff. February 1, 1976;  
Amended Eff. January 31, 1979;  
Readopted Eff. August 1, 1982;  
Amended Eff. April 1, 1990;  
Readopted Eff.

#### **15A NCAC 05C .0104 SITE REGULATION**

The Secretary of the Department of Environmental Quality ~~Environment, Health, and Natural Resources~~ (and in areas in which wildlife resources will be appreciably affected, with the advice and approval of the Director of the N.C. Wildlife Resources Commission and representatives of the U.S. Fish and Wildlife Service, ~~Service~~) will shall designate the extent of ~~when, where, and~~ how much exploration work may ~~shall~~ be conducted under these Rules.

History Note: Authority G.S. 113-391;  
Eff. February 1, 1976;  
Amended Eff. January 31, 1979;  
Readopted Eff. August 1, 1982;  
Amended Eff. April 1, 1990;  
Readopted Eff.

#### **15A NCAC 05C .0105 PERMIT REQUIRED**

A permit from the Department ~~department~~ is required for all seismic exploration work in the area to which these rules are applicable. ~~applicable~~. No such seismic work shall be started without a permit and all such work ~~must~~ shall be carried out in such manner as may be approved by the Department. ~~said secretary~~.

History Note: Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0106 PERMIT APPLICATION**

Application for permits for such exploration work must shall be filed ~~in quadruplicate~~ with the department ~~Department~~ at least ~~10 days~~ 30 business days before issuance of permits and must shall be accompanied by a detailed map showing the exact area in which the geophysical operations are to be conducted, such area to be shown, where possible, by reference to established ~~coast~~ objects or geodetic landmarks. (The ~~department~~ Department may hereafter require applications to be filed on special forms to be provided by the department.) Permittees will ~~shall~~ also obtain appropriate assent from the lessee if and where the area under investigation is leased, with exclusive exploration privilege, to other than the permittee. If the applicant is not the owner of the land and owner of the mineral rights to be explored, the applicant shall include the owner's written consent for the applicant to submit an exploration application to conduct exploration activities.

History Note: Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0107 PERMIT DURATION**

Permits are limited to a period of six months from date of issue, but may be renewed for not more than two additional 90-day periods at the discretion of the Department, secretary. Applications for each renewal may be submitted made electronically, in letter form. After the expiration of a permit and any renewals thereof, work may continue or be resumed under any new permit issued or application made as provided in Rule ~~0006~~ .0106 of this ~~Subchapter~~ Section.

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0108 GEOGRAPHIC LIMITS ON WORK**

~~No~~ A seismic exploration shall not be conducted outside of the permitted area, crew shall work outside the area or areas as described in its permit or permits.

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0109 SEISMIC AGENTS**

Each seismic exploration crew working under a permit issued pursuant to these rules ~~will~~ shall always be accompanied by a seismic agent, unless written exception has been granted by the Department, secretary. ~~When If a geophysical company crew employs more than one shooting component or more than one seismic vibration crew unit and the operations units are at such a distance apart that it is impossible for the seismic agent to travel from one to the other in time to observe the shots of each crew, it will be required that an agent shall be assigned to each geophysical shooting component of the crew, crew. The seismic agent shall be present for each shot and each use of the seismic vibrator method, will be constantly present during the shooting operations of the party to which he is assigned.~~

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0110 DAILY REPORT REQUIRED**

The permittee shall file a daily report ~~Daily reports on such exploration work shall be filed with the Department~~ ~~department by the seismic agent at the end of each working day, period. A separate report must shall be made for each day whether or not data acquisition shooting is in progress. These reports must furnish complete information as indicated on the report form and must be signed by the party chief and by the seismic agent. The party chief will furnish only such information to the seismic agent as is required to fill out the daily reports. Should the department wish to secure any other information, it will furnish the party chief with a written request. The Department may request additional information.~~

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0111 NOTIFICATION**

~~Operators~~ Permittees shall notify the ~~Department~~ department electronically with verifying receipt at least ~~one week~~ two weeks in advance of the beginning, and shall give notice of interruption, and of cessation of work in any ~~area, area, and shall keep the department informed of name and address of party chief, and location and movements of the crew or quarter boat.~~

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0112 SIZE OF EXPLOSIVE CHARGES**

Charges in excess of 50 pounds of TNT or its equivalent shall not be used except pursuant to written authorization from the Department, department. Requests shall be submitted with the permit application to the Department, for the use Use of such charges ~~must shall~~ be made in writing, giving the reasons why such charges are needed, the size of charges to be used, and the depth at which they are to be suspended or buried. ~~Such requests should be addressed to the department.~~ Should multiple charges be used, the total amount of explosive should not exceed 50 pounds of TNT or its equivalent without ~~special~~ permission from the Department, department.

*History Note:* Authority G.S. 113-391;

*Eff. February 1, 1976;*  
*Readopted Eff. August 1, 1982;*  
*Readopted Eff.*

#### **15A NCAC 05C .0113 PLACING OF CHARGES**

The placing of explosive charges on the bottoms of the water at any area covered by a permit issued pursuant to these rules is ~~prohibited.~~  
~~prohibited. No undetonated charges shall be left.~~ No such charges should be detonated that are less than five feet to the bottom, nearer  
~~to the bottom or water bed than five feet.~~ No undetonated charges shall be left following the work day.

*History Note:* *Authority G.S. 113-391;*  
*Eff. February 1, 1976;*  
*Readopted Eff. August 1, 1982;*  
*Readopted Eff.*

#### **15A NCAC 05C .0115 REMOVAL**

All pipe used in geophysical operations ~~must~~ shall be removed by the ~~party~~ permittee using such pipe to at least six feet below the bottom ~~or water bed (and~~ and in charted navigable channels, ~~at least eight feet below charted dredge depth)~~ depth before ~~finally~~ leaving the ~~shot point.~~ location where the pipe is placed.

*History Note:* *Authority G.S. 113-391;*  
*Eff. February 1, 1976;*  
*Readopted Eff. August 1, 1982;*  
*Readopted Eff.*

#### **15A NCAC 05C .0116 IDENTIFICATION**

All ~~parties~~ permittees using pipe ~~must~~ shall have ~~clearly~~ stamped at each end of each joint the name or abbreviation of the name of the ~~company using the pipe.~~ permittee.

*History Note:* *Authority G.S. 113-391;*  
*Eff. February 1, 1976;*  
*Readopted Eff. August 1, 1982;*  
*Readopted Eff.*

#### **15A NCAC 05C .0117 PIPES AND BUOYS**

All pipes, buoys, and other markers used in connection with seismic work shall be ~~properly~~ flagged in the daytime and lighted at night according to the navigation rules of the U.S. Army Corps of Engineers and the U.S. Coast Guard.

*History Note:* *Authority G.S. 113-391;*  
*Eff. February 1, 1976;*  
*Readopted Eff. August 1, 1982;*  
*Readopted Eff.*

#### **15A NCAC 05C .0118 EXPLOSIVES**

No explosives shall be discharged within 1,000 feet of a ~~fishing~~ boat operating in the ~~waters,~~ water without notice being given to such boat so that it may move from the area. ~~Before any shot is discharged the exploration party shall employ methods approved by the industry to frighten or drive away the fish and/or marine life which may be in the area where the shot is to be discharged. If there is a school or schools of fish in the area to be shot, operations must be suspended in that particular area until said school or schools of fish have been driven away.~~

*History Note:* *Authority G.S. 113-391;*  
*Eff. February 1, 1976;*  
*Readopted Eff. August 1, 1982;*  
*Readopted Eff.*

#### **15A NCAC 05C .0119 SHOOTING**

(a) No shooting will be allowed except in daylight hours. ~~hours so that the seismic agent may observe the results of each shot, except that, in the discretion of the department and on written request stating the reasons therefor special written permission may be granted for night shooting.~~

(b) No shooting ~~will~~ shall be allowed in heavy fog. ~~fog due to danger to boats in close proximity.~~

(c) The permittee shall stop ~~Persistent~~ gas and water spouts caused by drilling or shooting operations of seismic crews as soon as possible, but no later than 24 hours. ~~will be stopped by permittee as soon as possible after they occur.~~

*History Note:* *Authority G.S. 113-391;*  
*Eff. February 1, 1976;*  
*Readopted Eff. August 1, 1982;*

#### 15A NCAC 05C .0120 MINIMUM DEPTHS

(a) Minimum required depths of charges detonated in holes below the bottom ~~or bed of the inland or offshore waters~~ water within the jurisdiction of this ~~state~~ State shall be as follows:

- |     |   |                           |
|-----|---|---------------------------|
| (1) | five pounds or less of <u>TNT or its equivalent</u> ; | 20 feet below the bottom, |
| (2) | up to 20 pounds of <u>TNT or its equivalent</u> ;     | 40 feet below the bottom, |
| (3) | up to 30 pounds of <u>TNT or its equivalent</u> ;     | 50 feet below the bottom, |
| (4) | up to 40 pounds of <u>TNT or its equivalent</u> ;     | 60 feet below the bottom, |
| (5) | up to 50 pounds of <u>TNT or its equivalent</u> ;     | 70 feet below the bottom. |

(b) ~~No part of the charge shall be above the minimum required depth.~~ Irrespective of the minimum depths specified in Paragraph (a) of this Rule, all charges shall be detonated at sufficient depths to prevent cratering.

(c) These minimum required depths shall not apply to trial charges and charges for determining condition of the weathering layer; provided that such charges are not over five pounds and not fired without permission of the seismic agent, ~~and then no more often than absolutely necessary.~~

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### 15A NCAC 05C .0121 DETAILED PROVISIONS

(a) When more than one shot is fired in the same ~~hole, hole and there is any reasonable doubt in the mind of either the seismic the~~ permittee shall measure agent or the field manager of the party as to the legal depth of the hole after the shot is fired, the hole will be measured for depth every shot is fired. ~~before reloading to ascertain that it is the required depth in accordance with the table of charges and depth.~~

(b) All surveying hub stakes 2 x 2's used for survey lines ~~must~~ shall be clearly stamped with the name of the permittee company using the stakes at ~~approximately~~ three-foot intervals.

(c) All holes drilled in geophysical operations in land areas ~~must~~ shall be filled ~~filled~~, by the permittee ~~the persons or agency drilling these holes~~, before leaving the location.

(d) No explosives shall be discharged within 300 feet of any oyster reef or bed, including any state-owned natural reefs, or within 300 feet of any dock, pier, causeway or other ~~fixed structure, structure anchored to the seabed~~ without written permission signed by the owner ~~and/or and~~ lessee of the reef or bed, approved by the ~~department.~~ Department.

~~(e) All shot charges suspended in the water by floats shall be of such type and packaged in such manner that same will disintegrate and neutralize in the water within a short time, and any suspended charge which fails to discharge shall be immediately removed from the water if same can, in the opinion of the party chief or manager, be done without endangering the life of any member of the party, but, in no event, shall any such undischarged suspended charge be abandoned without destroying the floats attached thereto. Where inflated floats are used, all charges will be suspended from dual floats either of which will be capable of retaining the charge at the proper depth.~~

~~(f)(c)~~ Boats, marsh buggies or other types of marsh vehicles ~~must~~ shall be so used as to cause the minimum disturbance of an injury to lands, waterbottoms, and wildlife and fisheries thereon. ~~All such vehicles shall be clearly painted or otherwise distinctively marked so as to be easily seen and identified.~~

~~(g) Agents assigned to seismic crews are to be employees of and under the supervision of the department.~~

~~(h) The department on request, will have access to all records, such as shot point location maps, shooters' logs and tracings, but only to the extent necessary to determine that all protective requirements have been complied with.~~

~~(i) The interpretation of these rules by the department will be accepted by the seismic operator and the seismic agent.~~

~~(j) The party chief will instruct the members of his party as to these rules, and to the duty and authority of the department and the seismic agent.~~

~~(k) The party chief will assist the seismic agent to fill out the required form by furnishing all necessary data.~~

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### 15A NCAC 05C .0123 POWERS OF SEISMIC AGENTS

The seismic agent has the right to stop any particular ~~shooting shooting, if, in his opinion, if~~ it will violate the rules in this Subchapter, but does not have the authority to shut down the entire exploration work. ~~If, in the opinion of the seismic agent, If~~ such violations continue, he or she ~~shall~~ will immediately contact the Department within 24 hours. ~~department, and the members of the exploration party will assist him to do this with all the facilities at their disposal.~~

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0124 DUTIES OF PARTY CHIEF**

(a) The party chief ~~shall provide~~ ~~will furnish~~ the ~~department~~ Department's representative supervisor or his or her agent with transportation facilities ~~to for inspection enable him to visit of~~ the working area, if required.

(b) The party chief is required to notify the Department ~~department immediately~~ if the seismic agent is not on the working area, job, and will notify the ~~department supervisor~~ if it should become necessary to relieve an agent at any time. The Department ~~department supervisor will~~ shall arrange relief for the seismic agent, agent, if necessary.

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0125 RELEASE FROM THESE REGULATIONS**

No seismic agent shall have the right to release any operator from the obligations imposed by these rules. Permittee may request an exception to these rules in writing by setting forth reasons for the request. Exceptions may be granted by the ~~department~~ Department only, after written application setting forth reasons for exception. The release and will shall designate the particular area and rule affected and the procedure to be followed in lieu of the established rule.

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

#### **15A NCAC 05C .0126 DUTIES OF OPERATORS**

All ~~operators~~ permittees conducting seismic operations shall use ~~reasonable~~ precaution in accordance with approved and accepted ~~methods.~~ methods to prevent destruction of, or injury to, fish, oysters, shrimp, and other aquatic life, wildlife, or other natural resources.

*History Note:* Authority G.S. 113-391;  
Eff. February 1, 1976;  
Readopted Eff. August 1, 1982;  
Readopted Eff.

## **Regulatory Impact Analysis**

**Rule Citation:** 15A NCAC 05C .0101 – .0126

**Rule Topic:** Geophysical Exploration

**Commission:** Oil and Gas Commission

**DEQ Division:** Energy, Mineral, and Land Resources

**Staff Contact:** James Chapman, Senior Geologist  
Division of Energy, Mineral, and Land Resources (DEMLR)  
[james.chapman@deq.nc.gov](mailto:james.chapman@deq.nc.gov)  
919-707-9231

### **Impact Summary:**

State government: Yes  
Local government: No  
Private entities: Yes  
Environment: No  
Substantial Impact: No

### **1. Necessity for Rule Change**

The Oil and Gas Commission (the Commission), created by N.C. Gen. Stat. § 143B-293.1, administers the Oil and Gas Conservation Act, Article 27 of Chapter 113 of the General Statutes. The Commission is responsible for establishing a modern regulatory program for the management of oil and gas exploration and development of the State and the use of horizontal drilling and fracturing. The Commission manages the oil and gas development program through regulations designed to protect public health and safety; protect public and private property; protect and conserve the State's air, water, and other natural resources; promote economic development and expand employment opportunities. The Department of Environmental Quality (the Department or DEQ) is tasked with administering and enforcing rules adopted by the Commission in accordance with N.C. Gen. Stat. § 113-391(a4).

N.C. Gen. Stat. § 150B-21.3A requires state agencies to review existing rules every 10 years by adherence to the following summary criteria: (1) conduct an analysis of each existing rule and make an initial determination as to whether the rule is necessary or unnecessary; (2) allow for a public comment period; and (3) agency consultation with the Joint Legislative Administrative Procedure Oversight Committee. The Commission is considered an agency as defined by N.C. Gen. Stat. § 150B-2(1b) and therefore is subject to the periodic review requirements at N.C. Gen. Stat. § 150B-21.3A. The proposed rulemaking for 15A NCAC 05C falls within this purview.

### **2. Purpose of Rules**

The Commission is directed by N.C. Gen. Stat. § 113-391(a) to adopt rules regulating pre-drilling exploration activities, including geophysical surveys, stratigraphic surveys, and testing. The rules in 15A NCAC 05C establish the procedures related to pre-drilling for oil and natural gas



exploration activities, including seismic and other geophysical and stratigraphic surveys and testing as required in N.C. Gen. Stat. § 113-391.

### 3. Regulatory Baseline

As part of the permanent rulemaking process, under the Administrative Procedure Act, N.C. Gen. Stat. § 150B-19.1(e) requires agencies to quantify to the “greatest extent possible” the costs and benefits of proposed rule changes to affected parties. To do so, it is necessary to establish a regulatory baseline for comparison. For this analysis, the following items are considered the baseline: (1) the current version of rules in 15A NCAC 05C (effective February 1, 1976); and (2) N.C. Gen. Stat. § 113-391.

### 4. Proposed Rule Changes and Impact Analysis

The following table contains summaries of the proposed rule amendments and a statement about the anticipated impact of each change.

Rule	Proposed Change	Impact
15A NCAC 05C .0101 Definitions	Reformatted the definitions to match other rules within the Department’s authority.  Revised definitions and added definitions for the following terms for clarity: <ul style="list-style-type: none"> <li>- “Party chief”</li> <li>- “Secretary”</li> <li>- “Seismic agent”</li> <li>- “Seismic vibrator method”</li> <li>- “Shooting component”</li> </ul>	Negligible benefit to applicants and permittees from improved rule clarity.
15A NCAC 05C .0103 Correspondence	Revised for clarity.  For consistency, “Department” is capitalized here and throughout the rules when referring to the Department of Environmental Quality (DEQ).	Negligible benefit to applicants and permittees from improved rule clarity.
15A NCAC 05C .0104 Site Regulation	Revised for clarity.  Removed the mandatory approval of the Director of the N.C. Wildlife Resources Commission and representatives of the U.S. Fish and Wildlife Services. The rule will still require that DEQ seek the “advice” of these entities as to the extent of exploration work that may be conducted.	This is a potential, incremental benefit to the applicant, as the removal of the approval step could allow for a more efficient and timely application process.
15A NCAC 05C .0105 Permit Required	Revised for clarity and consistency.	Negligible benefit to applicants and permittees from

Rule	Proposed Change	Impact
		improved rule clarity.
15A NCAC 05C .0106 Permit Application	<p>Revised for clarity and consistency.</p> <p>Modernized the application process by removing the requirement for an applicant to file a permit application in “quadruplicate” (i.e., paper copies). This has the effect of allowing an applicant to file an application electronically.</p> <p>Increased the number of days by which an applicant must file an application before a permit can be issued from “at least 10 days” to “at least 30 business days.” Considering staffing limitations, an increase from 10 days to 30 days is a more reasonable time expectation in the case that the Department has received multiple permit applications within a short time period.</p>	<p>Modernizing the application process could provide a potential benefit to the applicant, as it allows for a more efficient and timely application process.</p> <p>Increasing the lead time required for filing an application is unlikely to have any effect because the actual time that an applicant will have to wait for a decision from the Department will not change, so there should be no impact. However, an applicant’s expectations will align closer to reality.</p>
15A NCAC 05C .0107 Permit Duration	<p>Revised for clarity and consistency.</p> <p>Modernized the renewal process to allow the applicant to submit a renewal application electronically.</p>	This is a potential benefit to the applicant, as it allows for a more efficient and timely renewal process.
15A NCAC 05C .0108 Geographic Limits on Work	Revised for clarity.	Negligible benefit to applicants and permittees from improved rule clarity.
15A NCAC 05C .0109 Seismic Agents	<p>Revised for clarity and consistency.</p> <p>Added language to account for the possibility that a seismic exploration company may use seismic vibrator techniques, rather than</p>	None. The use of explosives is generally less expensive than seismic vibrator

<b>Rule</b>	<b>Proposed Change</b>	<b>Impact</b>
	explosives, as is currently the preferred industry norm.	techniques, so it is unlikely that a permittee would opt to use seismic vibrator techniques. Explosives are still a permissible option for geophysical exploration and thus no impact is anticipated due to this change.
15A NCAC 05C .0110 Daily Report Required	Revised for clarity and consistency.  Modernized the daily report process by allowing the permittee to file their report by methods other than using a “report form.” Daily reports could be no more formal than an email statement from the permittee to the Department representative.	This is a potential benefit to the permittee, as it allows for a more efficient and timely daily report process.
15A NCAC 05C .0111 Notification	Revised for clarity and consistency.  The one-week notice to the Department was revised to a two-week notice to allow for the Department to better manage its workload obligations.  References to keeping the Department informed of the name and address of the party chief was removed because the information sought should be satisfied by the required reports in 15A NCAC 05C .0110.	Negligible benefit to DEQ from additional flexibility to manage its workload.
15A NCAC 05C .0112 Size of Explosive Charges	Revised for clarity and consistency.  “TNT” is replaced with “TNT or its equivalent.”	Negligible benefit to permittees from improved rule clarity.
15A NCAC 05C .0113 Placing of Charges	Revised for clarity.	Negligible benefit to permittees from improved rule clarity.
15A NCAC 05C .0115 Removal	Revised for clarity and to accommodate potential non-explosive seismic exploration techniques. A “shot point” is only relevant to seismic exploration using explosives, whereas	Negligible benefit to permittees from improved rule clarity.

<b>Rule</b>	<b>Proposed Change</b>	<b>Impact</b>
	“location where the pipe is placed” is inclusive of all current modern techniques.	
15A NCAC 05C .0116 Identification	Revised for clarity.	Negligible benefit to permittees from improved rule clarity.
15A NCAC 05C .0117 Pipes and Buoys	Revised for clarity.	Negligible benefit to permittees from improved rule clarity.
15A NCAC 05C .0118 Explosives	<p>Revised for clarity.</p> <p>Changed prohibition on discharging explosives from within 1,000 feet of a fishing boat to 1,000 feet of any boat operating in the waters. As safety is a concern for all boat traffic in the water, it was determined that “fishing boat” should be generalized to include all boats.</p> <p>References to approved methods for clearing the test area of potential freely mobile aquatic life was determined to be an overly burdensome requirement. Aquatic life not able to freely remove themselves from the testing area (i.e. oyster beds) are addressed elsewhere in the ruleset (.0126).</p>	Potential benefit to all boaters on the water from increased safety, regardless of boat type, function, or purpose.
15A NCAC 05C .0119 Shooting	<p>Revised for clarity.</p> <p>Removed allowance for permittee to request permission for night shooting. For the same reason that paragraph (b) currently disallows shooting in heavy fog conditions, it was determined that detonating explosives during the night is as dangerous by the same reasoning – a visual inspection of the immediate surroundings pre-blasting is greatly encumbered.</p> <p>Paragraph (c) was revised to clarify “as soon as possible” to be within 24 hours in regard to a permittee stopping gas and water spouts.</p>	There would be an expected increase in public safety, due to the night blasting restriction.
15A NCAC 05C .0120 Minimum Depths	Revised for clarity and consistency.	Negligible benefit to permittees from

<b>Rule</b>	<b>Proposed Change</b>	<b>Impact</b>
		improved rule clarity.
15A NCAC 05C .0121 Detailed Provisions	<p>Revised for clarity and consistency.</p> <p>Replaced “fixed structure” in paragraph (d) with “structure anchored to the seabed” for clarity.</p> <p>Paragraph (e) is proposed for deletion because it was determined to be unnecessary because it is now understood in the industry that detonating explosives at the water surface for accurate seismic reflection data is ineffectual and therefore is no longer an industry practice.</p> <p>Paragraph (f) is proposed for deletion because it was determined to be an undue burden for the permittee.</p> <p>Paragraph (g) was moved to 15A NCAC 05C .0101.</p> <p>Paragraphs (i) and (k) are redundant and are proposed for deletion.</p> <p>Paragraph (j) is proposed for deletion because it is not a “rule” within the definition of the Administrative Procedure Act.</p>	Negligible benefit for both safety (by requiring structure to be anchored to the seabed) and for the permittee by eliminating the undue burden of marking vehicles.
15A NCAC 05C .0123 Powers of Seismic Agents	Revised for clarity and consistency.	Negligible benefit to permittees from improved rule clarity.
15A NCAC 05C .0124 Duties of Party Chief	<p>Revised for clarity and consistency.</p> <p>In paragraph (b), the burden for the party chief to inform the Department of the need to replace the seismic agent was removed. It was determined that it should be the responsibility of the Department to keep track of the needs of their seismic agent. Therefore, enforcing the permittee party chief to inform the Department when, or if, the Department’s seismic agent needs relief from the job site is an undue burden to the permittee’s party chief. The rule will still require the</p>	Negligible benefit to permittees from improved rule clarity.

<b>Rule</b>	<b>Proposed Change</b>	<b>Impact</b>
	Department to arrange relief for the seismic agent, if necessary.	
15A NCAC 05C .0125 Release from these Regulations	Revised for clarity and consistency.	Negligible benefit to permittees from improved rule clarity.
15A NCAC 05C .0126 Duties of Operators	Revised for clarity.	Negligible benefit to permittees from improved rule clarity.

## 5. Summary

As compared to baseline, the expected economic and environmental impacts are negligible and were not monetized for this analysis. The proposed amendments to the subject rules are primarily technical, aimed at enhancing clarity by updating agency names, modernizing application procedures and exploration methods, and ensuring consistency with other current DEQ rules. Gendered language has been removed throughout. These changes should simplify the rules and clarify the requirements for applicants, permittees, and the Department.

The inclusion in the ruleset for guidance of seismic vibrator exploration techniques as an option for geophysical exploration could be viewed as encouragement for the use of these techniques. As such, if utilized, a reduced environmental impact could be realized as the seismic vibrator techniques are much more controlled than using explosives in geophysical exploration. Compared to baseline, this impact is minimal, since the option to utilize explosives in geophysical exploration is retained (although rarely used in the industry today).

Reasons behind the more substantial changes are described as follows:

- For 15A NCAC 05C .0101(b), the phrase “seismic exploration” is expanded to include seismic vibration techniques, as well as the traditional explosives method. This is an expansion necessary to include modern industry technology widely preferred by exploration entities. As the technique is a more controllable force, the effect should prove less intrusive to human and animal life, as well as property. The change in the “Definitions” section cascades through the rest of these rules.
- For 15A NCAC 05C .0107, allowing for forms to be filled out and sent to the Department electronically by the permittee is introduced here but is also replicated in the changes in 15A NCAC 05C .0111. This change should reduce some of the time that a permittee would have to wait for Department action and modernizes application procedures.

The proposed amendments will maintain similar to existing environmental protections. Although in Rule .0104, approval from the Director of the N.C. Wildlife Resources

Commission and representatives of the U.S. Fish and Wildlife Services is recommended for deletion, the required advice sought from these agencies is still maintained. The viewpoints of these agencies will still be a required part of the Department's knowledge base from which to make decisions with respect to the environment.

Although no permits have yet to be issued for any aspect of recovering oil or gas from the subsurface in the State, the potential for future interest is a reasonable expectation. At the time of their drilling, both hydrogen and helium were recorded with greater than nominal signatures in the two capped natural gas exploration wells drilled in Lee County in 1998. There could potentially be extraction interest for either of these two derivative gasses in the future.

1 15A NCAC 05C .0101 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **SUBCHAPTER 5C - GEOPHYSICAL EXPLORATION**  
4

5 **15A NCAC 05C .0101 DEFINITIONS**

6 ~~(d)(a) Department.~~ “Department” Whenever the word "department" is referred to in these rules, it shall mean means  
7 the North Carolina Department of Environment, Health, and Natural Resources Environmental Quality in Raleigh,  
8 North Carolina.

9 ~~(a)(b) “Explorations” Explorations.~~ Whenever the word "explorations" is referred to in these rules, it shall mean  
10 means geological, geophysical and other surveys and investigations, including seismic methods for the discovery and  
11 location of oil, gas or other mineral prospects, and which may or may not involve the use of explosives.

12 (c) “Party chief” means the leader of the on-site crew conducting the exploration work for a company that is permitted  
13 to conduct such work under these rules.

14 (d) “Secretary” means Secretary of the Department of Environmental Quality.

15 (e) “Seismic agent” means a North Carolina Department of Environmental Quality representative who shall be  
16 responsible for observing and monitoring compliance with the rules and regulations of the Department and the issued  
17 permit for geophysical operations.

18 ~~(b)(f) Seismic Explorations.~~ “Seismic explorations” The word "seismic explorations" shall mean means any  
19 geophysical exploration method which involves involving the use of explosives. explosives and shall include the  
20 seismic vibrator method.

21 (g) “Seismic vibrator method” means a vibrator device used as an energy source to generate a controlled acoustic  
22 wave train.

23 (h) “Shooting component” means one explosive charge.

24 ~~(e)(i) Shot.~~ “Shot” The word "shot" as used in these rules shall mean means the use and detonation of TNT, powder,  
25 dynamite, nitroglycerin nitroglycerin, each use of the seismic vibrator method, or other explosives.

26  
27 *History Note: Authority G.S. 113-391;*  
28 *Eff. February 1, 1976;*  
29 *Amended Eff. January 31, 1979;*  
30 *Readopted Eff. August 1, 1982;*  
31 *Amended Eff. April 1, 1990;*  
32 *Readopted Eff.*  
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1 15A NCAC 05C .0103 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0103 CORRESPONDENCE**

4 Reports and correspondence by all parties in connection with these rules shall be addressed to "North Carolina  
5 Department of ~~Environment, Health, and Natural Resources~~, Environmental Quality" in Raleigh, N.C." unless ~~from~~  
6 ~~time to time~~ parties subject to these rules shall be notified in writing by the ~~department~~ Department to direct  
7 communications to a specified division or a specified representative of the ~~department~~ Department.

8  
9 *History Note: Authority G.S. 113-391;*  
10 *Eff. February 1, 1976;*  
11 *Amended Eff. January 31, 1979;*  
12 *Readopted Eff. August 1, 1982;*  
13 *Amended Eff. April 1, 1990;*  
14 *Readopted Eff.*  
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1 15A NCAC 05C .0104 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0104 SITE REGULATION**

4 The Secretary of the Department of Environmental Quality ~~Environment, Health, and Natural Resources~~ (and in areas  
5 ~~in which wildlife resources will be appreciably affected,~~ with the advice and approval of the Director of the N.C.  
6 Wildlife Resources Commission and representatives of the U.S. Fish and Wildlife Service, ~~Service~~) will shall  
7 designate the extent of when, where, and how much exploration work may shall be conducted under these ~~Rules~~ rules.

8  
9 *History Note: Authority G.S. 113-391;*  
10 *Eff. February 1, 1976;*  
11 *Amended Eff. January 31, 1979;*  
12 *Readopted Eff. August 1, 1982;*  
13 *Amended Eff. April 1, 1990;*  
14 *Readopted Eff.*  
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1 15A NCAC 05C .0105 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0105 PERMIT REQUIRED**

4 A permit from the Department ~~department~~ is required for all seismic exploration work in the area to which these rules  
5 are ~~applicable~~. applicable. No such seismic work shall be started without a permit and all such work ~~must~~ shall be  
6 carried out in such manner as may be approved by the Department. ~~said secretary~~.

7  
8 *History Note: Authority G.S. 113-391;*  
9 *Eff. February 1, 1976;*  
10 *Readopted Eff. August 1, 1982;*  
11 *Readopted Eff.*  
12  
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1 15A NCAC 05C .0106 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0106 PERMIT APPLICATION**

4 Application for permits for such exploration work ~~must~~ shall be filed ~~in quadruplicate~~ with the ~~department~~ Department  
5 at least ~~10 days~~ 30 business days before issuance of permits and ~~must~~ shall be accompanied by a detailed map showing  
6 the exact area in which the geophysical operations are to be conducted, such area to be shown, where possible, by  
7 reference to established ~~coast~~ objects or geodetic landmarks. ~~(The department may hereafter require applications to~~  
8 ~~be filed on special forms to be provided by the department.)~~ Permittees will ~~shall~~ also obtain appropriate assent from  
9 ~~the lessee if and where the area under investigation is leased, with exclusive exploration privilege, to other than the~~  
10 ~~permittee.~~ If the applicant is not the owner of the land and owner of the mineral rights to be explored, the applicant  
11 shall include the owner's written consent for the applicant to submit an exploration application to conduct exploration  
12 activities.

13  
14 *History Note: Authority G.S. 113-391;*  
15 *Eff. February 1, 1976;*  
16 *Readopted Eff. August 1, 1982;*  
17 *Readopted Eff.*  
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1 15A NCAC 05C .0107 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0107 PERMIT DURATION**

4 Permits are limited to a period of six months from date of issue, but may be renewed for not more than two additional  
5 90-day periods at the discretion of the Department. ~~secretary~~. Applications for each renewal may be submitted ~~made~~  
6 electronically. ~~in letter form~~. After the expiration of a permit and any renewals thereof, work may continue or be  
7 resumed under any new permit issued or application made as provided in Rule ~~0006~~ .0106 of this ~~Subchapter~~ Section.

8  
9 *History Note: Authority G.S. 113-391;*  
10 *Eff. February 1, 1976;*  
11 *Readopted Eff. August 1, 1982;*  
12 *Readopted Eff.*  
13  
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1 15A NCAC 05C .0108 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0108 GEOGRAPHIC LIMITS ON WORK**

4 ~~No A seismic exploration shall not be conducted outside of the permitted area, crew shall work outside the area or~~  
5 ~~areas as described in its permit or permits.~~

6  
7 *History Note: Authority G.S. 113-391;*  
8 *Eff. February 1, 1976;*  
9 *Readopted Eff. August 1, 1982;*  
10 *Readopted Eff.*  
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1 15A NCAC 05C .0109 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0109 SEISMIC AGENTS**

4 Each seismic exploration crew working under a permit issued pursuant to these rules ~~will~~ shall always be accompanied  
5 by a seismic agent, unless written exception has been granted by the Department. ~~secretary.~~ ~~When~~ If a geophysical  
6 company crew employs more than one shooting component or more than one seismic vibration crew unit and the  
7 operations units are at such a distance apart that it is impossible for the seismic agent to travel from one to the other  
8 in time to observe the shots of each crew, ~~it will be required that~~ an agent shall be assigned to each geophysical  
9 ~~shooting component of the crew.~~ crew. The seismic agent shall be present for each shot and each use of the seismic  
10 vibrator method. ~~will be constantly present during the shooting operations of the party to which he is assigned.~~

11  
12 *History Note: Authority G.S. 113-391;*  
13 *Eff. February 1, 1976;*  
14 *Readopted Eff. August 1, 1982;*  
15 *Readopted Eff.*  
16  
17  
18

1 15A NCAC 05C .0110 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0110 DAILY REPORT REQUIRED**

4 The permittee shall file a daily report ~~Daily reports on such exploration work shall be filed with the Department~~  
5 ~~department by the seismic agent at the end of each working day. period. A separate report must shall be made for each~~  
6 ~~day whether or not data acquisition shooting is in progress. These reports must furnish complete information as~~  
7 ~~indicated on the report form and must be signed by the party chief and by the seismic agent. The party chief will~~  
8 ~~furnish only such information to the seismic agent as is required to fill out the daily reports. Should the department~~  
9 ~~wish to secure any other information, it will furnish the party chief with a written request. The Department may request~~  
10 additional information.

11  
12 *History Note: Authority G.S. 113-391;*  
13 *Eff. February 1, 1976;*  
14 *Readopted Eff. August 1, 1982;*  
15 *Readopted Eff.*  
16  
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1 15A NCAC 05C .0111 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0111 NOTIFICATION**

4 ~~Operators Permittees~~ shall notify the Department ~~department~~ electronically with verifying receipt at least ~~one week~~  
5 two weeks in advance of the beginning, and shall give notice of interruption, and of cessation of work in any ~~area,~~  
6 area. ~~and shall keep the department informed of name and address of party chief, and location and movements of the~~  
7 ~~crew or quarter boat.~~

8  
9 *History Note: Authority G.S. 113-391;*  
10 *Eff. February 1, 1976;*  
11 *Readopted Eff. August 1, 1982;*  
12 *Readopted Eff.*  
13  
14  
15

1 15A NCAC 05C .0112 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0112 SIZE OF EXPLOSIVE CHARGES**

4 Charges in excess of 50 pounds of TNT or its equivalent shall not be used except pursuant to written authorization  
5 from the Department. ~~department.~~ Requests shall be submitted with the permit application to the Department. ~~for the~~  
6 ~~use~~ Use of such charges ~~must~~ shall be made in writing, giving the reasons why such charges are needed, the size of  
7 charges to be used, and the depth at which they are to be suspended or buried. ~~Such requests should be addressed to~~  
8 ~~the department.~~ Should multiple charges be used, the total amount of explosive should not exceed 50 pounds of TNT  
9 or its equivalent without ~~special~~ permission from the Department. ~~department.~~

10  
11 *History Note: Authority G.S. 113-391;*  
12 *Eff. February 1, 1976;*  
13 *Readopted Eff. August 1, 1982;*  
14 *Readopted Eff.*  
15  
16  
17

1 15A NCAC 05C .0113 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0113 PLACING OF CHARGES**

4 The placing of explosive charges on the bottoms of the water at any area covered by a permit issued pursuant to these  
5 rules is ~~prohibited.~~ prohibited. No undetonated charges shall be left. No such charges should be detonated that are  
6 less than five feet to the bottom. nearer to the bottom or water bed than five feet. No undetonated charges shall be left  
7 following the work day.

8  
9 *History Note: Authority G.S. 113-391;*  
10 *Eff. February 1, 1976;*  
11 *Readopted Eff. August 1, 1982;*  
12 *Readopted Eff.*  
13  
14  
15

1 15A NCAC 05C .0115 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0115 REMOVAL**

4 All pipe used in geophysical operations ~~must~~ shall be removed by the ~~party~~ permittee using such pipe to at least six  
5 feet below the bottom ~~or water bed (and~~ and in charted navigable channels, ~~at least~~ eight feet below charted dredge  
6 ~~depth)~~ depth before ~~finally~~ leaving the ~~shot point.~~ location where the pipe is placed.

7  
8 *History Note: Authority G.S. 113-391;*  
9 *Eff. February 1, 1976;*  
10 *Readopted Eff. August 1, 1982;*  
11 *Readopted Eff.*  
12  
13  
14

1 15A NCAC 05C .0116 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0116 IDENTIFICATION**

4 All ~~parties~~ permittees using pipe ~~must~~ shall have ~~clearly~~ stamped at each end of each joint the name or abbreviation  
5 of the name of the ~~company using the pipe.~~ permittee.

6  
7 *History Note: Authority G.S. 113-391;*  
8 *Eff. February 1, 1976;*  
9 *Readopted Eff. August 1, 1982;*  
10 *Readopted Eff.*

1 15A NCAC 05C .0117 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0117 PIPES AND BUOYS**

4 All pipes, buoys, and other markers used in connection with seismic work shall be ~~properly~~ flagged in the daytime  
5 and lighted at night according to the navigation rules of the U.S. Army Corps of Engineers and the U.S. Coast Guard.

6  
7 *History Note: Authority G.S. 113-391;*  
8 *Eff. February 1, 1976;*  
9 *Readopted Eff. August 1, 1982;*  
10 *Readopted Eff.*  
11  
12  
13

1 15A NCAC 05C .0118 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0118 EXPLOSIVES**

4 No explosives shall be discharged within 1,000 feet of a ~~fishing~~ boat operating in the ~~waters~~, water without notice  
5 being given to such boat so that it may move from the area. ~~Before any shot is discharged the exploration party shall~~  
6 ~~employ methods approved by the industry to frighten or drive away the fish and/or marine life which may be in the~~  
7 ~~area where the shot is to be discharged. If there is a school or schools of fish in the area to be shot, operations must~~  
8 ~~be suspended in that particular area until said school or schools of fish have been driven away.~~

9  
10 *History Note: Authority G.S. 113-391;*  
11 *Eff. February 1, 1976;*  
12 *Readopted Eff. August 1, 1982;*  
13 *Readopted Eff.*  
14  
15  
16

1 15A NCAC 05C .0119 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0119 SHOOTING**

4 (a) No shooting will be allowed except in daylight ~~hours.~~ hours so that the seismic agent may observe the results of  
5 each shot, except that, in the discretion of the department and on written request stating the reasons therefor special  
6 written permission may be granted for night shooting.

7 (b) No shooting ~~will~~ shall be allowed in heavy fog. ~~fog due to danger to boats in close proximity.~~

8 (c) The permittee shall stop ~~Persistent~~ gas and water spouts caused by drilling or shooting operations of seismic crews  
9 as soon as possible, but no later than 24 hours. ~~will be stopped by permittee as soon as possible after they occur.~~

10  
11 *History Note: Authority G.S. 113-391;*

12 *Eff. February 1, 1976;*

13 *Readopted Eff. August 1, 1982;*

14 *Readopted Eff.*  
15  
16  
17



1 15A NCAC 05C .0120 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0120 MINIMUM DEPTHS**

4 (a) Minimum required depths of charges detonated in holes below the bottom ~~or bed of the inland or offshore waters~~  
5 water within the jurisdiction of this ~~state~~ State shall be as follows:

- 6 (1) five pounds or less of TNT or its equivalent; 20 feet below the bottom,  
7 (2) up to 20 pounds of TNT or its equivalent; 40 feet below the bottom,  
8 (3) up to 30 pounds of TNT or its equivalent; 50 feet below the bottom,  
9 (4) up to 40 pounds of TNT or its equivalent; 60 feet below the bottom,  
10 (5) up to 50 pounds of TNT or its equivalent; 70 feet below the bottom.

11 (b) ~~No part of the charge shall be above the minimum required depth.~~ Irrespective of the minimum depths specified  
12 in Paragraph (a) of this Rule, all charges shall be detonated at sufficient depths to prevent cratering.

13 (c) These minimum required depths shall not apply to trial charges and charges for determining condition of the  
14 weathering layer; provided that such charges are not over five pounds and not fired without permission of the seismic  
15 agent. ~~and then no more often than absolutely necessary.~~

16  
17 *History Note: Authority G.S. 113-391;*  
18 *Eff. February 1, 1976;*  
19 *Readopted Eff. August 1, 1982;*  
20 *Readopted Eff.*  
21  
22  
23

1 15A NCAC 05C .0121 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0121 DETAILED PROVISIONS**

4 (a) When more than one shot is fired in the same ~~hole~~, ~~hole and there is any reasonable doubt in the mind of either~~  
5 ~~the seismic~~ the permittee shall measure ~~agent or the field manager of the party as to the legal depth of the hole after~~  
6 ~~the shot is fired, the hole will be measured for depth every shot is fired, before reloading to ascertain that it is the~~  
7 ~~required depth in accordance with the table of charges and depth.~~

8 (b) All surveying hub stakes 2 x 2's used for survey lines ~~must~~ shall be ~~clearly~~ stamped with the name of the permittee  
9 ~~company~~ using the stakes at ~~approximately~~ three-foot intervals.

10 (c) All holes drilled in geophysical operations in land areas ~~must~~ shall be ~~filled~~ filled, by the permittee ~~the persons or~~  
11 ~~agency drilling these holes~~, before leaving the location.

12 (d) No explosives shall be discharged within 300 feet of any oyster reef or bed, including any state-owned natural  
13 reefs, or within 300 feet of any dock, pier, causeway or other ~~fixed structure~~, structure anchored to the seabed without  
14 written permission signed by the owner ~~and/or~~ and lessee of the reef or bed, approved by the ~~department~~. Department.

15 (e) ~~All shot charges suspended in the water by floats shall be of such type and packaged in such manner that same~~  
16 ~~will disintegrate and neutralize in the water within a short time, and any suspended charge which fails to discharge~~  
17 ~~shall be immediately removed from the water if same can, in the opinion of the party chief or manager, be done without~~  
18 ~~endangering the life of any member of the party, but, in no event, shall any such undischarged suspended charge be~~  
19 ~~abandoned without destroying the floats attached thereto. Where inflated floats are used, all charges will be suspended~~  
20 ~~from dual floats either of which will be capable of retaining the charge at the proper depth.~~

21 (f)(c) Boats, marsh buggies or other types of marsh vehicles ~~must~~ shall be so used as to cause the minimum disturbance  
22 of an injury to lands, waterbottoms, and wildlife and fisheries thereon. ~~All such vehicles shall be clearly painted or~~  
23 ~~otherwise distinctively marked so as to be easily seen and identified.~~

24 (g) Agents assigned to seismic crews are to be employees of and under the supervision of the department.

25 (h) ~~The department on request, will have access to all records, such as shot point location maps, shooters' logs and~~  
26 ~~tracings, but only to the extent necessary to determine that all protective requirements have been complied with.~~

27 (i) The interpretation of these rules by the department will be accepted by the seismic operator and the seismic agent.

28 (j) ~~The party chief will instruct the members of his party as to these rules, and to the duty and authority of the~~  
29 ~~department and the seismic agent.~~

30 (k) ~~The party chief will assist the seismic agent to fill out the required form by furnishing all necessary data.~~

31  
32 *History Note: Authority G.S. 113-391;*  
33 *Eff. February 1, 1976;*  
34 *Readopted Eff. August 1, 1982;*  
35 *Readopted Eff.*  
36  
37  
38

1 15A NCAC 05C .0123 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0123 POWERS OF SEISMIC AGENTS**

4 The seismic agent has the right to stop any particular ~~shooting~~ shooting, ~~if, in his opinion,~~ if it will violate the rules in  
5 this Subchapter, but does not have the authority to shut down the entire exploration work. ~~If, in the opinion of the~~  
6 ~~seismic agent,~~ If such violations continue, he or she shall ~~will immediately~~ contact the Department within 24 hours.  
7 ~~department, and the members of the exploration party will assist him to do this with all the facilities at their disposal.~~

8  
9 *History Note: Authority G.S. 113-391;*  
10 *Eff. February 1, 1976;*  
11 *Readopted Eff. August 1, 1982;*  
12 *Readopted Eff.*  
13  
14  
15

1 15A NCAC 05C .0124 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0124 DUTIES OF PARTY CHIEF**

4 (a) The party chief ~~shall provide~~ will furnish the ~~department~~ Department's representative supervisor or his or her  
5 agent with transportation facilities ~~to~~ for inspection ~~enable him to visit~~ of the working area, if required.

6 (b) The party chief is required to notify the Department ~~department immediately~~ if the seismic agent is not on the  
7 working area. job, and ~~will notify the department supervisor if it should become necessary to relieve an agent at any~~  
8 ~~time.~~ The Department ~~department supervisor will~~ shall arrange relief for the seismic agent. agent, if necessary.

9  
10 *History Note: Authority G.S. 113-391;*

11 *Eff. February 1, 1976;*

12 *Readopted Eff. August 1, 1982;*

13 *Readopted Eff.*  
14  
15  
16

1 15A NCAC 05C .0125 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0125 RELEASE FROM THESE REGULATIONS**

4 No seismic agent shall have the right to release any operator from the obligations imposed by these rules. Permittee  
5 may request an exception to these rules in writing by setting forth reasons for the request. Exceptions may be granted  
6 by the ~~department~~ Department ~~only, after written application setting forth reasons for exception.~~ The release and will  
7 shall designate the particular area and rule affected and the procedure to be followed in lieu of the established rule.

8  
9 *History Note: Authority G.S. 113-391;*  
10 *Eff. February 1, 1976;*  
11 *Readopted Eff. August 1, 1982;*  
12 *Readopted Eff.*  
13  
14  
15

1 15A NCAC 05C .0126 IS PROPOSED FOR READOPTION AS FOLLOWS:

2  
3 **15A NCAC 05C .0126 DUTIES OF OPERATORS**

4 All ~~operators~~ permittees conducting seismic operations shall use ~~reasonable precaution~~ in accordance with approved  
5 and accepted ~~methods~~. methods to prevent destruction of, or injury to, fish, oysters, shrimp, and other aquatic life,  
6 wildlife, or other natural resources.

7  
8 *History Note: Authority G.S. 113-391;*  
9 *Eff. February 1, 1976;*  
10 *Readopted Eff. August 1, 1982;*  
11 *Readopted Eff.*  
12  
13

## **B. Public Hearing Transcript**

Hearing Officer's Statement

7 January 2025, 6:00 p.m.

15A NCAC 05C

**Commissioner William Vizuite (Hearing Officer):**

*This hearing will now come to order.*

*Good evening, my name is William Vizuite and I am a current Commissioner on the NC Oil & Gas Commission. My role as hearing officer is to receive comments on the proposed rule actions and the regulatory impact analysis, then report those comments and recommend action to the N.C. Department of Environmental Quality.*

*During the public hearing this evening, we will be receiving oral comments on the proposed adoption from the NC Mining Commission of the 15A NCAC 05C (Geophysical Exploration) ruleset, with proposed amendments. If you signed up to speak, your name will be called, and we will ask that you proceed to the front of the room to give your oral comment once we conclude a brief presentation.*

*We will now open the hearing on the proposed adoption of 15A NCAC 05C (Geophysical Exploration) ruleset.*

*A regulatory impact analysis was drafted for these rule changes and the final version was approved for publication by the NC Office of State Budget and Management pursuant to G.S. 150B-19.1(c) on 13 September 2024. The Office of State Budget*



*and Management determined that the proposed amendments would have an impact on state government, though these impacts are expected to be minimal.*

*The public notice for this hearing was published in Volume 39, Issue 12 of the North Carolina Register on 16 December 2024, and the public notice and regulatory impact analysis were posted on the Department of Environmental Quality's rules website. The Department of Environmental Quality also issued a press release regarding this public hearing, which was posted to the Department of Environmental Quality's website and emailed to all those individuals subscribing to the Department's press release distribution system. We will add the public notice, regulatory impact analysis, and the proposed rule changes into the hearing record without reading them at this time.*

*Jim Chapman with the North Carolina Geological Survey will give a brief overview of the rules proposed for adoption.*

**Jim Chapman (NC Geological Survey / NCDEQ):**

*The Oil and Gas Commission, created by N.C. Gen. Stat. § 143B-293.1, administers the Oil and Gas Conservation Act, Article 27 of Chapter 113 of the General Statutes. The Commission is responsible for establishing a modern regulatory program for the management of oil and gas exploration and development of the State and the use of horizontal drilling and hydraulic fracturing. The Commission manages the oil and gas development program through regulations designed to protect public health and safety; protect public and private property; protect and conserve the State's air, water, and other natural resources; promote economic development and expand employment opportunities. The Department of Environmental Quality (the*

*Department or DEQ) is tasked with administering and enforcing rules adopted by the Commission in accordance with N.C. Gen. Stat. § 113-391(a4).*

*The Commission is directed by N.C. Gen. Stat. § 113-391(a) to adopt rules regulating pre-drilling exploration activities, including geophysical surveys, stratigraphic surveys, and testing. The rules in 15A NCAC 05C establish the procedures related to pre-drilling for oil and natural gas exploration activities, including seismic and other geophysical and stratigraphic surveys and testing as required in N.C. Gen. Stat. § 113-391.*

*The 05C (geophysical exploration) ruleset currently has 26 statutes. 3 of the statutes are recommended for elimination, while the remaining 23 statutes are proposed for revision at some level, even if just for clarity and consistency, or to keep pace with changes within the industry.*

*The specifics of the rules changes can be found in the notice in Volume 39, Issue 12 of the North Carolina Register and the Dept. of Environmental Quality's rules website (which is also linked to from the NC O&GC web page).*

**Commissioner William Vizueté (Hearing Officer):**

*We will now take comments on adoption and amendments to 15A NCAC 05C (Geophysical Exploration) ruleset. I will call the name of each of the registered speakers in order. When I call your name, please proceed to the front of the room to give your oral comment.*

*If you did not register to speak, but still want to provide comments on the proposed rulemaking, remember there are several other ways to provide comments until the*

*end of the comment period on 14 February 2025. To provide written comments, you can either:*

- *email them to [oilandgas@deq.nc.gov](mailto:oilandgas@deq.nc.gov) with “Geophysical Exploration Rules” in the subject line OR*
- *mail them to Jim Chapman, NCDEQ – Division of Energy, Mineral, and Land Resources, 1612 Mail Service Center, Raleigh, NC 27699-1612.*

*[called on speakers – no public speakers came forward]*

*Thank you all for your participation in this public hearing and your interest in the public hearing process. This hearing is adjourned.*

### **C. Written Public Comments**

**From:** [Sharon Garbutt](#)  
**To:** [Chapman, Jim](#)  
**Subject:** [External] Comments on proposed rule changes: 15A NCAC 05C .0101 – .0126  
**Date:** Monday, February 10, 2025 6:22:40 PM

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Dear Mr. Chapman,

Thank you for the opportunity to submit comments on proposed changes to the set of rules regulating geophysical exploration for oil and gas in North Carolina.

I appreciate the effort it takes to update and clarify these rules. I was able to attend the discussion of the proposed rule changes by the Rules Committee of the Oil and Gas Commission and appreciate their serious commitment to establishing strong rules.

I have concerns regarding three proposed rule changes as follows:

- .0104: The proposed change recommends the removal of the requirement for “mandatory approval” by the Director of the NC Wildlife Resources Commission and by a representative of the US Fish and Wildlife Services even though wildlife resources will be appreciably affected by the exploration activities. Instead DEQ will be required only to “seek the advice” of these agencies regarding the extent of exploration work that may be conducted. This change will reduce the authority of governmental wildlife experts to protect wildlife resources. The Regulatory Impact Analysis states that this change will allow for a “more efficient and timely application process.” However, removal of the requirement for “approval” by the NC Wildlife Resources Commission and the US Fish and Wildlife Services will reduce the protections that regulations are written to insure. Given the high level of threats to so many land and aquatic species, it would seem imperative to protect these species by requiring input from the NC WRC and the US Fish and Wildlife Services. The input of these two agencies was obviously seen as warranted when this section was last readopted in the early 1990’s and the plight of many land and aquatic species has worsened since that time, making this protection even more important now than it was when this rule was last readopted.
- .0110: The proposed change recommends that the daily report process be changed to allow the permittee to file their daily report by methods other than using a standard report form. Daily reports could be no more formal than an e-mail statement from the permittee to a Department representative. This could make it more difficult for citizens to monitor the exploration activities being employed by contractors.
- .0118: The proposed revisions remove the need for the exploration party to employ methods approved by the industry to drive away fish and marine life that may be in the area where an explosive is to be discharged. The proposed revision also removes the requirement to suspend operations in an area until all schools of fish have been driven away. These proposed revisions leave open the possibility of unnecessary killing of fish and marine life. This is particularly possible if plan approvals by the NC Wildlife Resources Commission and the US Fish and Wildlife Services are no longer required (See .0104 above.) The Regulatory Impact Analysis states that the requirement to clear an area of fish and marine life was determined to be an “overburdensome requirement.” However, it apparently was not considered overburdensome when this requirement was

last readopted in 1982. It is likely that there are now more advanced techniques to easily and effectively assure removal of fish and aquatic animals than were techniques available in 1982. Furthermore, populations of many fish and marine animals are now more threatened than they were in 1982, making their protection even more important now than it was when this rule was last readopted.

I appreciate your consideration of my concerns as outlined above.

Thank you again for the time and effort DEQ staff dedicate to updating the entire set of rules regulating geophysical exploration for oil and gas in North Carolina.

Sincerely,

T. Sharon Garbutt  
Chatham County, NC

DEQ Public Comments  
Periodic Review of Geophysical Exploration Rules  
Proposed Rules Revision  
**15A NCAC 05C .0101–.0126**  
February 14, 2025

I am submitting the following public comments on the proposed geophysical exploration rule changes for adoption:

**1. 15A NCAC 05C .0104. Site Regulation**

Marine biodiversity is in decline. The full extent of damage to marine wildlife populations from cumulative exposure to human-made sounds (propagating particle motion as well as sound pressure) is unknown. Seismic exploration is particularly impactful on marine life since surveys may cover many square miles. And the explosives used are disruptive and harmful stressors to fish and other marine wildlife populations—not just to marine mammals—especially, since “sound propagates through water almost four times faster than in air”. Therefore, to what extent is it protective enough only to seek advice from the Director of the N.C. Wildlife Resources Commission and representatives of the U.S. Fish and Wildlife Services. Minimizing the potential negative impacts on marine wildlife from geophysical operation(s) should require approval from personnel in both agencies. Their expertise enables them to review and make determinations to approve/modify plans that are more protective of North Carolina’s marine resources.

**2. 15A NCAC 05C .0110. Daily Report Required**

How would the public have access to daily reports from the permittee if other methods as stated are used for filing to the Department?

**3. 15A NCAC 05C .0118. Explosives**

**Before any shot is discharged, the exploration party shall employ methods approved by the industry to frighten or drive away fish and/or marine life which may be in the area where the shot is to be discharged. If there is a school or schools of fish in the area to be shot, operations must be suspended until school or schools of fish have been driven away.**

Safety concern for freely mobile aquatic life may be an overly burdensome requirement for industry but the current requirements should be retained. Otherwise, the proposed revision could result in harming fish or marine mammals actively hunting fish in the exclusion zone. Firing should stop until marine wildlife exits this area. (See first comment listed above.)

**4. 15A NCAC 05C .0121 Detailed Provisions**

**(g)–(k) ~~Agents~~ Seismic agent assigned to seismic crews are to be employees of and under the supervision of the ~~department~~ Department.**

Reliance on self-reporting may be prone to error if biased or entered incorrectly. Regulations may be misunderstood by a seismic agent with limited experience or unfamiliarity with NC regulations.

**5. 15A NCAC 05C .0123 Powers of Seismic Agents.**

**~~If such violations continue, he or she shall contact the seismic agent shall will immediately contact. . .~~**

**15A NCAC 05C .0124 Duties of Party Chief**

**(a) The party chief shall provide the Department’s representative or ~~his or her~~ the seismic agent with. . .**

Consider making two changes, shown above, as noted in Regulatory Impact Analysis report to implement 5. Summary, page 7: Gendered language has been removed throughout.

Thank you for the opportunity to submit public comments on the concerns that I have about the proposed geophysical exploration rules revision.

Jeannie Ambrose

From: HOPE TAYLOR <hopesea@centurylink.net>

Sent: Friday, February 14, 2025 3:57 PM

To: Chapman, Jim

Subject: [External] Comments of Clean Watre for NC on proposed Oil and Gas Rules Changes

February 14, 2025

Mr. James Chapman

Division of Energy, Mineral and Land Resources

Archdale Building

1612 Mail Service Center

Raleigh, NC 27699-1612

Dear Mr. Chapman:

I am submitting the following comments on the proposed regulatory changes for oil and gas exploration in NC, 15A NCAC 05C .01010-.0126 on behalf of Clean Water for North Carolina, a statewide science-based Environmental Justice organization with members in over 60 NC counties. CWFNC has worked extensively on regulatory processes for oil and gas and served on a DEQ Advisory Group that participated in critiques of early oil and gas rules a decade ago.

15A NCAC 05C .0106 Permit Application--Increasing to 30 days the period of time for agency review before a permit can be granted is definitely a benefit to the agency and to the public, as staffing limitations could otherwise make careful review and approval by



associated entities extremely difficult. My only question is whether 30 days is actually adequate to provide the necessary review to ensure protection of the public's resources.

15A NCAC 05C .0110 Daily Report Required--The change of reporting requirement from a form to be submitted daily to as little as an informal daily email is not acceptable, as it will weaken the agency's and the public's ability to monitor ongoing activity. If an email submission is to be accepted for daily reports, there must be minimum parameters and descriptions required and all reports must be logged and available on line to both agency staff and the public.

15A NCAC 05C .0118 Explosives--Changing the safety requirements to include 1,000 feet from any boat is a public benefit and we support this. However, references to approved methods for clearing the test area of potential freely mobile aquatic life must be retained to reinforce protections for aquatic life. Especially if required mandatory approvals by WRC and F&WS are weakened, this could result in avoidable and needless mortality to fish and other marine life.

Thank you very much for your attention to our concerns,

Hope Taylor, MSPH

Executive Director, Clean Water for North Carolina

(919) 401-9600 [hope@cwfncc.org](mailto:hope@cwfncc.org)

Convenor of the FrackFreeNC Alliance

**From:** [gary.purgason](#)  
**To:** [Chapman, Jim](#)  
**Subject:** [External] I oppose 15A NCAC 05C rule changes  
**Date:** Tuesday, February 11, 2025 4:27:43 PM

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Dear Sir, I strongly oppose this unnecessary and dangerous pipeline expansion in North Carolina. There is no need for more dirty fossil fuel build out. We have sufficient resources and new energy options are being developed. Let's move into the future and say goodbye to old technology. We deserve a cleaner less harmful energy policy.  
Sent from my iPad

Comment:

A moratorium should be placed on all geophysical exploration for oil and gas until we have sanity in the White House and, at the moment, a felon, who is also unstable, is firing employees of the Parks Service, reducing the EPA, withholding grants, saying ridiculous things that will only get Americans lose all that we've worked for. Musk was not elected and has no authority to tell people what to do. No NC regulations should change unless they are stricter; that's why I am in favor of a moratorium until the country becomes stable again.

Lib Hutchby

108 Standish Dr.

Chapel Hill, NC 27517

**D. Hearing Officer's Proposed Revisions to 15A NCAC 05C**

Based on review of the public comments, the North Carolina General Statutes, and the North Carolina Administrative Code, staff recommend that 15A NCAC 05C be readopted as set forth in the Notice of Text, with the following exceptions:

- 15A NCAC 05C .0123 and 15A NCAC 05C .0124 change references of “he or she” to “the seismic agent.”