### **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

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**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:  - "Party chief" - "Secretary" - "Seismic agent" - "Seismic vibrator method" - "Shooting component"	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	Revised for clarity and consistency.  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.  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.	Modernizing the application process could provide a potential benefit to the applicant, as it allows for a more efficient and timely application process.  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.
15A NCAC 05C .0107 Permit Duration	Revised for clarity and consistency.  Modernized the renewal process to allow the applicant to submit a renewal application electronically.	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	Revised for clarity and consistency.  Added language to account for the possibility that a seismic exploration company may use seismic vibrator techniques, rather than	None. The use of explosives is generally less expensive than seismic vibrator

Rule	Proposed Change	Impact
	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	Revised for clarity and consistency.	This is a potential
Daily Report Required	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.	benefit to the permittee, as it allows for a more efficient and timely daily report process.
15A NCAC 05C .0111	Revised for clarity and consistency.	Negligible benefit to
Notification	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.	DEQ from additional flexibility to manage its workload.
	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.	
15A NCAC 05C .0112	Revised for clarity and consistency.	Negligible benefit to
Size of Explosive Charges	"TNT" is replaced with "TNT or its equivalent."	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.

Rule	Proposed Change	Impact
	"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	Revised for clarity.	Potential benefit to
Explosives	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.	all boaters on the water from increased safety, regardless of boat type, function, or purpose.
	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).	
15A NCAC 05C .0119	Revised for clarity.	There would be an
Shooting	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.	expected increase in public safety, due to the night blasting restriction.
	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.	
15A NCAC 05C .0120 Minimum Depths	Revised for clarity and consistency.	Negligible benefit to permittees from

Rule	Proposed Change	Impact
		improved rule clarity.
15A NCAC 05C .0121 Detailed Provisions	Revised for clarity and consistency.  Replaced "fixed structure" in paragraph (d) with "structure anchored to the seabed" for clarity.  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.  Paragraph (f) is proposed for deletion because it was determined to be an undue burden for the permittee.	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.
	Paragraph (g) was moved to 15A NCAC 05C .0101.  Paragraphs (i) and (k) are redundant and are proposed for deletion.  Paragraph (j) is proposed for deletion because it is not a "rule" within the definition of the Administrative Procedure Act.	
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	Revised for clarity and consistency.  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	Negligible benefit to permittees from improved rule clarity.

Rule	Proposed Change	Impact
	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 **DEFINITIONS** 5 15A NCAC 05C .0101 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 responsible for observing and monitoring compliance with the rules and regulations of the Department and the issued 16 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. (e)(i) Shot. "Shot." The word "shot" as used in these rules shall mean means the use and detonation of TNT, powder, 24 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.

1 15A NCAC 05C .0103 IS PROPOSED FOR READOPTION AS FOLLOWS: 2 3 CORRESPONDENCE 15A NCAC 05C .0103 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; Readopted Eff. August 1, 1982; 12 Amended Eff. April 1, 1990; 13 14 Readopted Eff. 15 16

1 15A NCAC 05C .0104 IS PROPOSED FOR READOPTION AS FOLLOWS: 2 3 SITE REGULATION 15A NCAC 05C .0104 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; Amended Eff. January 31, 1979; 11 Readopted Eff. August 1, 1982; 12 Amended Eff. April 1, 1990; 13 14 Readopted Eff. 15 16

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

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; Readopted Eff. August 1, 1982; 16 17 Readopted Eff. 18 19

1 15A NCAC 05C .0107 IS PROPOSED FOR READOPTION AS FOLLOWS: 2 3 PERMIT DURATION 15A NCAC 05C .0107 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 electronically. in letter form. After the expiration of a permit and any renewals thereof, work may continue or be 6 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; Eff. February 1, 1976; 10 11 Readopted Eff. August 1, 1982; 12 Readopted Eff. 13 14

1	15A NCAC 050	C .0108 IS PROPOSED FOR READOPTION AS FOLLOWS:
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3	15A NCAC 05	C .0108 GEOGRAPHIC LIMITS ON WORK
4	No A seismic e	exploration shall not be conducted outside of the permitted area erew shall work outside the area of
5	areas as describ	ed 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 erew 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

1 15A NCAC 05C .0110 IS PROPOSED FOR READOPTION AS FOLLOWS: 2 3 DAILY REPORT REQUIRED 15A NCAC 05C .0110 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 17

1	15A NCAC 050	C .0111 IS PROPOSED FOR READOPTION AS FOLLOWS:
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3	15A NCAC 050	C .0111 NOTIFICATION
4	Operators Perm	ittees shall notify the Department department electronically with verifying receipt at least one week
5	two weeks in a	dvance of the beginning, and shall give notice of interruption, and of cessation of work in any area,
6	area. and shall l	reep the department informed of name and address of party chief, and location and movements of the
7	<del>crew or quarter boat.</del>	
8 9	History Note:	Authority G.S. 113-391;
10		Eff. February 1, 1976;
11		Readopted Eff. August 1, 1982;
12		Readopted Eff.
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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. 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 Authority G.S. 113-391; History Note: 12 Eff. February 1, 1976; 13 Readopted Eff. August 1, 1982; 14 Readopted Eff. 15 16

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 <u>less than five feet to the bottom.</u> 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; Readopted Eff. 12 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 Authority G.S. 113-391; History Note: 9 Eff. February 1, 1976; 10 Readopted Eff. August 1, 1982; 11 Readopted Eff. 12 13

1	ISA NCAC 050	0116 IS PROPOSED FOR READOPTION AS FOLLOWS:
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3	15A NCAC 050	C .0116 IDENTIFICATION
4	All <del>parties</del> <u>perm</u>	nittees using pipe must shall have clearly stamped at each end of each joint the name or abbreviation
5	of the name of t	he 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.
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1	15A NCAC 050	C.0117 IS PROPOSED FOR READOPTION AS FOLLOWS:
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3	15A NCAC 05	C .0117 PIPES AND BUOYS
4	All pipes, buoy	s, and other markers used in connection with seismic work shall be properly flagged in the daytime
5	and lighted at n	ight 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.
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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; Readopted Eff. 13 14 15

1	15A NCAC 050	C .0119 IS PROPOSED FOR READOPTION AS FOLLOWS:
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3	15A NCAC 050	C.0119 SHOOTING
4	(a) No shooting	g will be allowed except in daylight hours. hours so that the seismic agent may observe the results of
5	each shot, excep	ot that, in the discretion of the department and on written request stating the reasons therefor special
6	written permissi	on may be granted for night shooting.
7	(b) No shooting	gwill shall be allowed in heavy fog. fog due to danger to boats in close proximity.
8	(c) The permitte	ee shall stop Persistent gas and water spouts caused by drilling or shooting operations of seismic crews
9	as soon as possi	ble, but no later than 24 hours. will be stopped by permittee as soon as possible after they occur.
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11	History Note:	Authority G.S. 113-391;
12		Eff. February 1, 1976;
13		Readopted Eff. August 1, 1982;
14		Readopted Eff.
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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 five pounds or less of TNT or its equivalent; \_20 feet below the bottom, (1) 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 up to 40 pounds of TNT or its equivalent; **(4)** 60 feet below the bottom, 10 up to 50 pounds of TNT or its equivalent; (5) 70 feet below the bottom. (b) No part of the charge shall be above the minimum required depth. Irrespective of the minimum depths specified 11 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

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

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#### 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 <u>surveying hub stakes 2 x 2's</u> used for survey lines <u>must shall</u> be <u>elearly</u> stamped with the name of the <u>permittee</u>
- 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, 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
- written permission signed by the owner and/orand 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)(e) 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.

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

3637

1 15A NCAC 05C .0123 IS PROPOSED FOR READOPTION AS FOLLOWS: 2 3 POWERS OF SEISMIC AGENTS 15A NCAC 05C .0123 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 050	C .0124 IS PROPOSED FOR READOPTION AS FOLLOWS:
2		
3	15A NCAC 050	C .0124 DUTIES OF PARTY CHIEF
4	(a) The party of	chief <u>shall provide</u> <del>will furnish</del> the <del>department</del> <u>Department's representative</u> <del>supervisor</del> or his <u>or her</u>
5	agent with trans	portation facilities to for inspection-enable him to visit of the working area, if required.
6	(b) The party of	chief is required to notify the <u>Department</u> department immediately if the seismic agent is not on the
7	working area. je	ob, and will notify the department supervisor if it should become necessary to relieve an agent at any
8	time. The Depart	arrange relief for the seismic 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 RELEASE FROM THESE REGULATIONS 15A NCAC 05C .0125 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 050	C .0126 DUTIES OF OPERATORS
4	All operators permittees conducting seismic operations shall use reasonable precaution in accordance with approve	
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		