# **CHAPTER 05 - MINING: MINERAL RESOURCES**

#### SUBCHAPTER 05C - GEOPHYSICAL EXPLORATION

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

- (a) Explorations. Whenever the word "explorations" is referred to in these rules, it shall mean 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.
- (b) Seismic Explorations. The word "seismic explorations" shall mean any geophysical exploration method which involves the use of explosives.
- (c) Shot. The word "shot" as used in these rules shall mean the use and detonation of powder, dynamite, nitroglycerin or other explosives.
- (d) Department. Whenever the word "department" is referred to in these rules, it shall mean the North Carolina Department of Environment, Health, and Natural Resources in Raleigh, North Carolina.

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.

#### 15A NCAC 05C .0102 SUPERVISION

The supervision and administration of these Rules shall be the responsibility of the Director of the Division of Energy, Mineral, and Land Resources.

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982;

Amended Eff. August 1, 2012 (see S.L. 2012-143, s.1.(f)); August 1, 1988.

## 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, Raleigh, N.C." unless from time to time parties subject to these rules shall be notified in writing by the department to direct communications to a specified division or a specified representative of the 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.

# 15A NCAC 05C .0104 SITE REGULATION

The Secretary of the Department of 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) will designate when, where, and how much exploration work 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.

## 15A NCAC 05C .0105 PERMIT REQUIRED

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

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.

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

Application for permits for such exploration work must be filed in quadruplicate with the department at least 10 days before issuance of permits and must 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 landmarks. (The department may hereafter require applications to be filed on special forms to be provided by the department.) Permittees will 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.

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.

## 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 secretary. Applications for renewal may be made 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 of this Subchapter.

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.

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

No seismic 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.

## 15A NCAC 05C .0109 SEISMIC AGENTS

Each seismic exploration crew working under permit issued pursuant to these rules will always be accompanied by a seismic agent, unless written exception has been granted by the secretary. When a crew employs more than one shooting component or unit and the 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 be assigned to each shooting component of the crew. The seismic agent 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.

# 15A NCAC 05C .0110 DAILY REPORT REQUIRED

Daily reports on such exploration work shall be filed with the department by the seismic agent at the end of each working period. A separate report must be made for each day whether or not 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.

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

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Eff. February 1, 1976;
Readopted Eff. August 1, 1982.
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#### 15A NCAC 05C .0111 NOTIFICATION

Operators shall notify the department at least one week in advance of the beginning, and shall give notice of interruption, and of cessation of work in any 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.

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

Charges in excess of 50 pounds shall not be used except pursuant to written authorization from the department. Requests for the use of such charges must 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 without special permission from the department.

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.

## 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. No undetonated charges shall be left. No such charges should be detonated nearer to the bottom or water bed than five feet.

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.

## 15A NCAC 05C .0114 CURRITUCK SPECIAL

All shots in Currituck Sound and tributary waters from Currituck Bridge at Point Harbor to the Virginia state line shall be in bored holes regardless of the depth of the water.

The requirements of the preceding paragraph shall not apply to trial charges and charges for determining position and water speed; provided that such charges are not over five pounds, and are not fired without permission of the seismic agent, and then not more often than absolutely necessary.

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

Readopted Eff. August 1, 1982.

## 15A NCAC 05C .0115 REMOVAL

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

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

*Eff. February 1, 1976;* 

Readopted Eff. August 1, 1982.

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

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

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.

#### 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. Engineers and the U.S. Coast Guard.

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.

## 15A NCAC 05C .0118 EXPLOSIVES

No explosives shall be discharged within 1,000 feet of a fishing boat operating in the waters, 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.

## 15A NCAC 05C .0119 SHOOTING

- (a) No shooting will be allowed except in daylight 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 be allowed in heavy fog due to danger to boats in close proximity.
- (c) Persistent gas and water spouts caused by drilling or shooting operations of seismic crews 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 within the jurisdiction of this state shall be as follows:
  - (1) five pounds or less 20 feet below the bottom,
  - (2) up to 20 pounds 40 feet below the bottom,
  - (3) up to 30 pounds 50 feet below the bottom,
  - (4) up to 40 pounds 60 feet below the bottom,
  - (5) up to 50 pounds 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 (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.

## 15A NCAC 05C .0121 DETAILED PROVISIONS

- (a) When more than one shot is fired in the same hole and there is any reasonable doubt in the mind of either the seismic 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 before reloading to ascertain that it is the required depth in accordance with the table of charges and depth.
- (b) All 2 x 2's used for survey lines must be clearly stamped with the name of the company using the stakes at approximately three-foot intervals.
- (c) All holes drilled in geophysical operations in land areas must be filled, by 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, without written permission signed by the owner and/or lessee of the reef or bed, approved by the 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) Boats, marsh buggies or other types of marsh vehicles must 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.

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

The seismic agent has the right to stop any particular shooting, if, in his opinion, 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, such violations continue, he will immediately contact the 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.

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

- (a) The party chief will furnish the department supervisor or his agent with transportation facilities to enable him to visit the working area, if required.
- (b) The party chief is required to notify the department immediately if the seismic agent is not on the job, and will notify the department supervisor if it should become necessary to relieve an agent at any time. The department supervisor will arrange relief for the agent.

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

*Eff. February 1, 1976;* 

Readopted Eff. August 1, 1982.

# 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. Exceptions may be granted by the department only, after written application setting forth reasons for exception. The release will 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.

# 15A NCAC 05C .0126 DUTIES OF OPERATORS

All operators conducting seismic operations shall use reasonable 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.

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

Eff. February 1, 1976;

Readopted Eff. August 1, 1982.