

**CHAPTER 43-02-12**  
**GEOPHYSICAL EXPLORATION REQUIREMENTS**

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**43-02-12-01. Definitions.** The terms used in this chapter have the same meaning as in North Dakota Century Code chapter 38-08.1 except:

1. "Building" means any residence or commercial structure including a barn, stable, or other similar structure.
2. "Director" means the director of oil and gas of the industrial commission, the assistant director of oil and gas of the industrial commission, and their designated representatives.

**History:** Effective December 1, 1997; amended effective September 1, 2000; January 1, 2006.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-01

**43-02-12-01.1. Scope of chapter.** This chapter contains general rules of statewide application which have been adopted by the industrial commission to govern geophysical exploration in North Dakota. Special rules, regulations, and orders have been and will be issued when required and shall prevail as against general rules, regulations, and orders if in conflict therewith. However, wherever this chapter does not conflict with special rules heretofore or hereafter adopted, this chapter will apply in each case. The commission may grant exceptions to this chapter, after due notice and hearing, when such exceptions will protect correlative rights.

**History:** Effective April 1, 2010.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-08

**43-02-12-02. Certification to do business within state - Resident agent.** Any person desiring to engage in geophysical exploration within this state, including a contractor and subcontractor, shall obtain from the secretary of state a certificate of authority to transact business in this state. A copy of this certificate must be filed

with the commission prior to, or together with, the bond required herein and the application for permit to engage in geophysical exploration.

**History:** Effective December 1, 1997.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-03

**43-02-12-03. Bonding requirements.**

1. To satisfy the obligation that a geophysical exploration contractor desiring to engage in geophysical exploration shall file with the commission a good and sufficient surety bond, the contractor, in lieu of a surety bond, may post cash or a certificate of deposit with the Bank of North Dakota. Persons desiring to file a cash bond or certificate of deposit shall file with the commission an application to deposit cash or certificate of deposit. If the applicant is currently in compliance with the statutes, rules, and orders of the commission, the commission will issue to the Bank of North Dakota a compliance statement authorizing the Bank of North Dakota to accept cash or a certificate of deposit as a bond for the applicant.
2. Geophysical exploration contractors shall file with the commission a good and sufficient bond in the amount of fifty thousand dollars if the contractor intends to conduct shot hole operations or in the amount of twenty-five thousand dollars if the contractor intends to use any other method of geophysical exploration. Each subcontractor engaged by the geophysical exploration contractor for the drilling and plugging of seismic shot holes shall file with the commission a good and sufficient bond in the amount of ten thousand dollars.

**History:** Effective December 1, 1997.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-03.1

**43-02-12-04. Exploration permit - Application - Expiration.**

1. Any person applying to the commission for an exploration permit must have a certificate to conduct geophysical exploration pursuant to subsection 3 of North Dakota Century Code section 38-08.1-03.1. A person may not commence geophysical exploration activities in this state without first obtaining an exploration permit from the commission. An application for an exploration permit must be submitted to the commission at least three business days before commencing operations and include the following:
  - a. The name, permanent address, and telephone number of the geophysical contractor and the geophysical contractor's local representative.

- b. The name, permanent address, and telephone number of the drilling and hole plugging contractor, if different from the seismic contractor.
  - c. The name and address of the resident agent for service of process of the person intending to engage in geophysical exploration.
  - d. The bond number, type, and amount for the geophysical company.
  - e. The geophysical exploration method (i.e., shot hole, nonexplosive, 2D, or 3D).
  - f. The number, depth, and location of the seismic holes and the size of the explosive charges, if applicable.
  - g. The anticipated starting date of seismic and plugging operations.
  - h. The anticipated completion date of seismic and plugging operations.
  - i. A description of hole plugging procedures.
  - j. A description of the identifying marks that will be on the nonmetallic plug to be used in the plugging of the seismic hole.
  - k. A preplot map displaying the proposed seismic source points and receiver lines and specifically identifying all source points that do not comply with section 43-02-12-05.
  - l. A fee of one hundred dollars.
2. The permit holder shall notify the commission at least twenty-four hours, excluding Saturdays and holidays, before commencing geophysical activity.
  3. The permit holder shall immediately notify the commission of any revisions to an approved seismic permit.
  4. An exploration permit expires one year after the date it was issued, unless geophysical exploration activities have commenced.

**History:** Effective December 1, 1997; amended effective September 1, 2000; May 1, 2004; April 1, 2010.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-04.1

**43-02-12-05. Distance restrictions - Shot hole operations - Nonexplosive methods.** Seismic shot hole operations may not be conducted

less than six hundred sixty feet [201.17 meters] from water wells, buildings, underground cisterns, pipelines, and flowing springs.

Nonexplosive exploration methods may not be conducted less than three hundred feet [91.44 meters] from water wells, buildings, underground cisterns, pipelines, and flowing springs.

Variances may be granted to this section by written agreement between the permit holder and the owner of the subject property and must be available to the director upon request.

**History:** Effective December 1, 1997; amended effective September 1, 2000; May 1, 2004.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-08

**43-02-12-06. Notification of work performed.** Within thirty days following the completion of geophysical exploration by any person within this state, such person shall file with the commission a seismic completion report in the form of an affidavit deposing that the seismic project was completed in accordance with chapter 43-02-12, and incorporating a postplot map displaying the actual source point location and the location of all undetonated (loaded) holes, blowouts, and flowing holes or any other problem holes the director deems necessary. If obtained by the contractor, the latitude and longitude of each source and receiver point shall be submitted to the commission to the nearest tenth of a second.

Any person plugging a seismic hole must submit a plugging report and an affidavit of plugging detailing the line number, shot point number, hole depth, drill type, hole condition (wet, dry), bentonite used (sacks, capsules), and the depth at which the surface plug was set, and all other information necessary to describe the conditions of the shot hole.

The director is authorized to approve an operator's request to suspend a geophysical exploration project, although no suspension shall be granted beyond ninety days unless all charges are detonated.

The director is authorized to suspend operations of the entire geophysical exploration project, or any portion thereof, if further activity will cause excessive damage to the surface of the land. The geophysical exploration activity may continue upon the director approving a plan to mitigate the damage.

**History:** Effective December 1, 1997; amended effective September 1, 2000; May 1, 2004; January 1, 2008; April 1, 2010.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-02, 38-08.1-05

#### **43-02-12-07. Drilling and plugging requirements.**

1. Prior to commencement of any drilling or plugging operations, the director may require a field meeting with the geophysical contractor and subcontractors.
2. Except in those circumstances in which the director allows otherwise, all seismic shot holes must be plugged the same day as they were drilled and loaded. Any blown out shot holes must be plugged as soon as reasonably practicable, unless, upon application, the director grants an extension which may not exceed ninety days. All seismic shot holes must be temporarily capped until final plugging.
3. If the number of drilling rigs on a proposed project exceeds the director's capacity to provide appropriate inspection, the director may limit the number of drilling rigs.
4. Bentonite materials used in seismic hole plugging must be derived from naturally occurring untreated, high swelling sodium bentonite which consists principally of the mineral montmorillonite.
5. A durable nonmetallic plug must be set at a depth of approximately three feet [91.44 centimeters] below the surface of every shot hole. The plug must be designed to fit the hole and shall be imprinted with the mark of the operator responsible for the plugging, the mark of the permit holder, and the permitted project number.
6. Unless the contractor can prove to the satisfaction of the commission that another method will provide better protection to ground water and long-term land stability, seismic shot hole plugging shall be conducted in the following manner:
  - a. When water is used in conjunction with the drilling of seismic shot holes or when water is encountered in the hole, the shot holes are to be filled with coarse ground bentonite approximately three-fourths of one inch [19.05 millimeters] in diameter from the top of the charge up to a depth above the final water level. Cuttings shall be added from the top of the bentonite to the surface. All cuttings added above the nonmetallic plug shall be tamped.
  - b. When drilling with air only, and in completely dry holes, a plugging may be accomplished by returning the cuttings to the hole. A small mound must be left over the hole for settling allowance.
  - c. Remaining cap leads must be cut off below ground level and any drilling fluid or cuttings which are deposited on the surface around the seismic hole will be spread out in such a manner that the growth of natural grasses or foliage will not be impaired.

- d. Any markings, including lath, pin flags, flagging, or any other debris left on the project area, including the powder magazine, must be removed and lawfully disposed of.

**History:** Effective December 1, 1997; amended effective September 1, 2000; May 1, 2004.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-02, 38-08.1-06, 38-08.1-06.1

**43-02-12-08. Books and records to be kept to substantiate reports.** All geophysical, drilling, and plugging contractors shall make and keep appropriate books and records for a period of not less than six years, covering their operations in North Dakota from which they may be able to make and substantiate the reports required by this chapter.

**History:** Effective September 1, 2000.

**General Authority:** NDCC 38-08.1

**Law Implemented:** NDCC 38-08.1-08