
Geophysical Regulation

THE OIL AND GAS ACT (C.C.S.M. c. 034)

**Regulation 110/94
Registered June 6, 1994**

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Part 1 - Interpretation

Definitions

1. In this regulation,

"Act" means The Oil and Gas Act;

"district office" means

- a. for a geophysical operation conducted in Townships 1 to 6, the Waskada District Office of the branch; and
- b. for a geophysical operation conducted north of Township 6, the Virden District Office of the branch;

"energy source" means a source of energy that is used in a geophysical operation to generate seismic waves for the purpose of obtaining geological information and includes:

- a. dynamite detonated in a shot hole;
- b. an explosive in the form of a cord; and
- c. equipment to create seismic waves through vibration of a pad placed on the ground surface;

"geophysical crew" means a group of individuals organized to conduct a geophysical operation;

"licensee" means the holder of a geophysical licence issued under Part 7 of the Act;

"road allowance" means a right of way surveyed for the purpose of a road by either the federal or provincial government survey and includes a right of way provided by a statute for the purpose of a road, a right of way dedicated to the public use as a highway, and a road allowance under the jurisdiction of a municipality;

"roadway" means the portion of a road allowance that is ordinarily used for vehicular traffic;

"shot hole" means a hole drilled for the sole purpose of detonating an explosive charge as part of a geophysical operation;

"surface improvement" means a structure of any kind and includes a well, railway, pipeline, flow line, roadway, power line, and a runway and taxiway for an aircraft.

Part 2 - Licensing and Approvals

Application for geophysical licence

2(1) An application under subsection 84(2) of the Act for a geophysical licence shall be made to the director on a form provided by or acceptable to the director and shall include the following:

- a. a fee and levy of \$150, consisting of an application fee of \$100 and a levy of \$50 for deposit in the Abandonment Fund Reserve Account;
- b. a performance deposit of \$5,000 in the form of:
 - (i) cash; or
 - (ii) a term deposit acceptable to the director:
 - (A) issued by a bank, trust company, or credit union; and
 - (B) assigned as to principal to the Minister of Finance (Manitoba) with confirmation in writing of assignment from the bank, trust company, or credit union.
- c. two copies of a 1:50,000 scale map indicating, with reference to sections, townships, ranges, and meridians or other references:
 - (i) the proposed survey lines and the number or letter of each line in the proposed survey;
 - (ii) the location of any energy source; and
 - (iii) the location of any public and private roads and trails that will be used to gain access to the area in which the geophysical operation is to be conducted.

Director may increase performance deposit

2(2) Where the director considers that special circumstances exist, the director may increase the amount of the performance deposit required under clause (1)(b) to not more than \$50,000.

Term of geophysical licence

3 The term of a geophysical licence shall be one year from the date of issue.

Licence may be amended before operation begins

4(1) Before commencing or during a geophysical operation, the licensee may apply to the director to amend the geophysical licence.

Application for amendment to include revised map

4(2) Where an amendment proposed in an application under subsection (1) affects the content of the map referred to in clause 2(1)(c), the licensee shall include a revised version of the map with the application.

Director may approve amendment subject to conditions

4(3) The director may amend a geophysical licence subject to such terms and conditions as the director considers necessary or advisable.

Cancellation of licence before operation begins

5 Where a geophysical operation has not commenced, the director may, on the request of the licensee, cancel the geophysical licence and return to the licensee the performance deposit submitted under section 2.

Part 3 - Field Operations

Restricted areas

6 No person shall conduct a geophysical operation:

- a. within the boundaries of a city, town, or village without the prior written approval of the responsible authority;
- b. within one kilometer of an active mining operation without the prior written approval of the Director of Mines under The Mines and Minerals Act;
- c. in any area designated as restricted under an Act of Manitoba or Canada without the prior written approval of the responsible authority under the Act; or
- d. on land other than a road allowance without the consent of the owner and occupant of the land.

Licensee to provide notice before operation begins

7(1) Before commencing a geophysical operation, a licensee shall provide notice of the licensee's estimate of the date of commencement and completion of the geophysical operation and the nature and location of the geophysical operation to:

- a. the district office;
- b. the office of each municipality or local government district in which the geophysical operation is to be conducted;
- c. the appropriate office of the Department of Highways and Transportation; and

- d. the appropriate office of Manitoba Hydro and the Manitoba Telephone System, and the operator of any gas distribution system or pipeline, whether provincially or federally regulated, in the area of the geophysical operation.

Licensee to provide maps and other information

7(2) The licensee shall provide:

- a. to the office referred to in clause (1)(b), maps showing any road allowance to be used and the location of proposed survey lines; and
- b. to the district office, the telephone number, address, and location of the field headquarters of each geophysical crew.

Licensee to give notice of change to district office

7(3) The licensee shall notify the district office of any change to the telephone number, address, or location of the field headquarters of a geophysical crew or the name of the person in charge of a geophysical crew.

Licensee to provide notice of completion

7(4) Within 72 hours of completion of a geophysical operation, the licensee shall notify the offices referred to in clauses (1)(a) and (b) of the date on which the geophysical operation was completed.

Identification of vehicles

8 A licensee shall ensure that every vehicle used in conducting a geophysical operation is labelled on both sides, in letters and numbers that are 10 cm or greater in height, "MANITOBA LICENCE NO.", followed by the number of the geophysical licence under which the geophysical operation is being conducted.

No operation within minimum distance set out in Schedule

9(1) Subject to subsection (2), the licensee shall ensure that a geophysical operation is not conducted within the minimum distances set out in the Schedule.

Director may vary distance set out in Schedule

9(2) Notwithstanding subsection (1), the director may, where he or she considers that special circumstances exist, increase or decrease a minimum distance set out in the Schedule to such distance as the director considers necessary or advisable.

Licensee to take precautions to protect property

9(3) Notwithstanding subsections (1) and (2), the licensee shall take all necessary precautions to prevent damage to any surface improvement or other property as a result of the geophysical operation.

Use of roadway and road allowance

10(1) Unless otherwise authorized by the director, no person shall conduct a geophysical operation:

- a. on a roadway;
- b. on the side slope of a roadway; or
- c. within one metre of the outer boundary of a road allowance.

Approval required before certain actions taken

10(2) No person shall conduct clearing, ditching, grading, or the construction of trails in connection with a geophysical operation on a road allowance without the prior written approval of the appropriate office of the Department of Highways and Transportation or, where the road allowance is within the jurisdiction of a municipality, the municipality.

Licensee to comply with directions re: road allowance

10(3) In conducting a geophysical operation on a road allowance, the licensee shall comply with the directions of the appropriate authority and shall perform any remedial work that is required by the authority.

Cut tree or bush to be placed on edge of road

10(4) Any tree or bush removed in the course of a geophysical operation shall be placed flat along the edge of the road allowance.

Licensee to provide for movement of traffic

10(5) The licensee of a geophysical operation shall ensure that during the geophysical operation:

- a. subject to clause (b), the passage of traffic on a roadway is not impeded; and
- b. protection of traffic and control of the movement of traffic is provided when necessary.

Only certified blaster may handle explosives

11(1) No person shall, in respect of a geophysical operation, handle or detonate an explosive unless the person holds a valid blaster's certificate issued under The Workplace Safety and Health Act.

Licensee to ensure compliance with Explosives Act

11(2) The licensee shall comply, and ensure that other persons involved in the geophysical operation comply, with the Explosives Act (Canada) in respect of the storage, transportation, and handling of explosives.

Director may approve explosive other than dynamite

11(3) No person shall use an explosive other than dynamite in a geophysical operation without the prior written approval of the director, who may provide such approval subject to any term or condition that he or she considers necessary or advisable.

Shot holes

12 Unless otherwise authorized by the director, no person shall:

- a. drill a shot hole in excess of 30 m in depth;
- b. use in a shot hole a single charge greater than 2 kg of dynamite; or
- c. use a fluid other than fresh water in drilling a shot hole.

Flowing shot hole

13(1) If a flow of gas or water is encountered during or after the drilling of a shot hole, the licensee shall:

- a. immediately discontinue the drilling;
- b. immediately notify an inspector of the flow;
- c. ensure that no explosive charge is detonated in the shot hole;
- d. abandon the shot hole in a manner that is approved by the inspector; and
- e. subject to subsection (2), within 72 hours after completion of the geophysical operation, submit a report of the flow to the district office on a form provided by or acceptable to the inspector.

Director may give exemption re: abandonment of shot hole

13(2) The director may exempt a licensee from compliance with clause (1)(d) where:

- a. the licensee and the owner of the land have agreed to convert the shot hole to a water well; and
- b. the completion of the shot hole will not result in damage to other land or property or interfere with the rights of other persons.

Notice of agreement under clause 2(a)

13(3) Where the licensee and the owner of the land have made an agreement under clause 2(a), the licensee shall give written notice of the location of the water well to the Director of the Water Resources Branch appointed under The Ground Water and Water Well Act and provide the director with written evidence that the owner of the land has assumed responsibility for the water well.

Abandonment of shot hole

14(1) Unless otherwise authorized by the director in writing, the licensee shall detonate a charge placed in a shot hole within 30 days after the day on which the charge is placed in the shot hole and shall abandon the shot hole in accordance with this section immediately after the charge is detonated.

Licensee's duties where explosive placed in shot hole

14(2) Unless otherwise authorized by the director, a licensee shall ensure that when an explosive charge is placed in a shot hole:

- a. the charge is securely fixed to a winged sandpoint container;
- b. the detonator wire is cut off at a maximum of 15 cm above ground level;
- c. the shot hole is filled to a depth of 1.5 m from the surface with drill cuttings from the shot hole;
- d. a plug that is approved by the inspector is inserted in the shot hole so that the top of the plug is not less than 0.5 m below ground level;
- e. the plug referred to in clause (d) is equipped with a tag or is stamped with the geophysical license number and the shot point number in a legible manner; and
- f. the remainder of the shot hole is filled with cuttings and tamped.

Duty of licensee after explosive detonated

14(3) The licensee shall ensure that, after the explosive charge is detonated, the detonator wire is cut off at ground level and the site of the shot hole is restored as nearly as practicable to its original condition so that:

- a. all subsidence is filled in;
- b. all excess material from the shot hole is spread evenly over the site;
- c. drainage is not obstructed; and
- d. any other shot hole that is disturbed by the geophysical operation is restored to a condition that is approved by an inspector.

Duty of licensee re: drilling or abandoning shot hole

14(4) The licensee shall ensure that the drilling or abandonment of a shot hole is conducted in a manner that prevents:

- a. the flow of surface water to an aquifer or other formation; and
- b. the movement of water from one formation to another.

Licensee to make second attempt to detonate charge

15(1) Where an explosive charge fails to detonate, the licensee shall immediately make a second attempt to detonate the charge.

Duty of licensee where charge does not detonate

15(2) Notwithstanding subsection 148(4) (misfires) of the Workplace Safety Regulation, Manitoba Regulation 108/88 R, where two attempts to detonate an explosive charge are unsuccessful, the licensee shall:

- a. immediately bury the detonation wire to a depth of not less than 0.5 m;
- b. abandon the shot hole in accordance with section 14; and
- c. within 72 hours of completion of the geophysical operation, submit a report to the district office respecting the unexploded charge on a form provided by or acceptable to an inspector.

Energy source point

16 Where possible, the licensee shall identify the location of any energy source by a tag that is:

- a. stamped legibly with the number of the geophysical licence; and
- b. wired or nailed to a post or tree located not more than 10 m from the energy source point.

Licensee to clean up site

17 The licensee shall, immediately upon completion of the geophysical operation, remove any debris and all stakes, flags, and other material and equipment relating to the geophysical operation.

Part 4 - Submission of Information and Reports

Progress reports

18 On the request of an inspector, and before 9:00 a.m. on the first day of each week on which the district office is open, a licensee shall report to the inspector the location of the geophysical crew and progress made in respect of the geophysical operation.

Licensee to file final report with director

19(1) Within 60 days after the completion of a geophysical operation, the licensee shall submit to the director a final report containing the following information:

- a. the date on which the geophysical operation was commenced and completed;
- b. a summary of all field operations conducted as part of the geophysical operation, including:
 - (i) the number of kilometres over which the geophysical operation was conducted;
 - (ii) any difficulty encountered in the geophysical operation; and
 - (iii) any variation from the geophysical operation authorized by the geophysical licence;
- c. two copies of the map submitted under clause 2(1)(c) indicating:
 - (i) the name of the licensee and the number of the geophysical licence;
 - (ii) any variation from the geophysical operation authorized by the geophysical licence that can be indicated on the map;
 - (iii) the location of any sample station, recording station, or shot hole or other energy source; and
 - (iv) any trail or road constructed for the purpose of the geophysical operation;
- d. for each shot hole:
 - (i) the ground elevation and depth of the shot hole;
 - (ii) the presence of any gas, oil, water, coal, gravel, sand, or other useful or potentially useful product;
- e. the result of any gravity, magnetic, electrical, radioactivity, or geochemical survey and a copy of the map submitted under clause 2(1)(c) on which the observed value at each recording station is indicated;
- f. the expenditures incurred in respect of the geophysical operation.

Submission of maps or processed data sections

19(2) The licensee may or, at the request of the director, shall submit maps or processed data sections based on data obtained from the geophysical operation.

Confidentiality of information in final report

20(1) The director shall hold confidential any information submitted under section 19 for the following periods of time from the day on which the geophysical operation is completed:

- a. under clauses 19(1)(a) to (d), for one year;
- b. under clause 19(1)(e), for three years;
- c. under subsection 19(2), for 10 years.

Confidentiality of financial information

20(2) Information submitted under clause 19(1)(f) shall not be released other than as part of general statistical information.

Form and content of submitted documents

21 A document that is required under this regulation to be submitted to the director shall be in a form provided by or acceptable to the director and completed in a manner satisfactory to the director.

Liability of licensee

22 The licensee is liable for any damage to public or private property resulting from the licensee's geophysical operation and, where damage occurs, the licensee shall:

- a. immediately take action to prevent further damage;
- b. as soon as practicable, notify the owner of the property and the district office of the location and extent of the damage; and
- c. remedy the damage to the satisfaction of the owner of the property and the inspector.

Repeal

23 The Petroleum Geophysical Regulation, Manitoba Regulation 431/87 R, is repealed.

Coming into force

24 This regulation comes into force on the day The Oil and Gas and Consequential Amendments Act, S.M. 1993, chapter 4, comes into force.

**SCHEDULE
(Section 9)**

Minimum Distances

Definitions

1 In this schedule,

"dam" means a barrier constructed for the purpose of enabling the storage of water with a storage capacity of not less than 30 000 m and that is not less than 3 m in height;

"high pressure pipeline" means a pipeline designed to operate or intended to be operated at a pressure of more than 700 kPa;

"low pressure gas distribution pipeline" means a gas distribution pipeline designed to operate or intended to be operated at a pressure of not more than 700 kPa.

Explosive charge greater than 10 kg

2 The director shall determine the minimum distance required for an explosive charge greater than 10 kg.

Table of Minimum Distances

Type of surface improvement	Non-explosive		Explosive
	Minimum Distance (metres)	Charge Weight (kilograms)	Minimum Distance (metres)
A structure with a concrete base	50	Not more than 10	180
A water well	100	Not more than 10	180
A water pipeline, low pressure gas distribution pipeline, measured from the centre line of the pipeline, or an irrigation canal that is more than 4 m wide.	10	Not more than 10	10
A residential driveway, gateway, survey monument, buried telephone or telecommunication line, or underground electrical facility	3	Not more than 10	3
A high pressure pipeline, measured from the centre line of the pipeline, or an oil or gas well	15	Not more than 2 More than 2, not more than 4 More than 4, not more than 6 More than 6, not more than 8 More than 8, not more than 10	32 45 55 64 72