

## **Onshore Petroleum Geophysical Exploration Regulations**

made under Section 29 of the  
Energy Resources Conservation Act  
R.S.N.S. 1989, c. 147  
and Section 27 of the  
Petroleum Resources Act  
R.S.N.S. 1989, c. 342

O.I.C. 2000-73 (February 23, 2000), N.S. Reg. 24/2000

as amended to O.I.C. 2015-98 (March 31, 2015, effective April 1, 2015), N.S. Reg. 98/2015

### Citation

1 These regulations may be cited as the Onshore Petroleum Geophysical Exploration Regulations.

### Interpretation

2 (1) In these regulations,

(a) “Acts” means the Energy Resources Conservation Act and the Petroleum Resources Act;

(b) “Administrator” means a person designated by the Minister pursuant to Section 4 of these regulations and includes an acting administrator;

(c) “Authority to Explore” means an authority granted by the Administrator pursuant to these regulations to conduct certain exploration on specified lands;

(d) “Board” means the Energy and Mineral Resources Conservation Board established by the Energy Resources Conservation Act and includes a person who is delegated duties or responsibilities of the Energy Board pursuant to Section 12 of that Act;

(e) “cut line” means a trail cleared of vegetation for the purpose of conducting an exploration survey;

(f) “energy source” means a power source that is used to generate energy for the purpose of obtaining geophysical information;

(g) “exploration” means a geophysical operation on or over land or water to determine geologic conditions underlying the surface of land or water and an operation that is preparatory to or otherwise connected with the geophysical operation that, in the opinion of the Administrator, has the potential to cause surface disturbance;

(h) “explorer” means the holder of an Authority to Explore and employees, contractors, agents or anyone carrying out exploration or work related to exploration for or on behalf of the holder;

(i) “heritage object” means heritage object as defined in the Special Places Protection Act;

(j) “marine lands” means submerged lands not administered or managed by the Canada-Nova Scotia Offshore Petroleum Board, including but not limited to St. George’s Bay, Chedabucto Bay, and the Minas Basin;

(k) “Minister” means the Minister of Energy;

[Note: the reference to the Minister has been updated in accordance with Order in Council 2002-286 under the Public Service Act, R.S.N.S. 1989, c. 376, effective June 17, 2002.]

(l) “non-exclusive survey” means a geophysical operation that is conducted to acquire data for the purpose of sale, in whole or in part, to the public;

(m) “offshore area” means offshore area as defined in the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act;

(n) “petroleum” means petroleum as defined in the Petroleum Resources Act;

(o) “public lands” means land of the Crown in right of the Province of Nova Scotia, but does not include mines and minerals or a public highway or public road;

(p) “recording” means the process by which exploration data is obtained or retrieved from an energy source;

(q) “right holder” means the holder of a right granted pursuant to the Petroleum Resources Act or regulations made under that Act;

(r) “shothole” means a hole drilled or a trench made for the purpose of detonating an explosive charge for the purpose of obtaining geophysical information;

(s) “sourcepoint” means the surface location at which an energy source is deployed;

(t) “survey monument” means a post, stake, pin, mound of rock or other material, pit, trench or any other thing used to mark a triangulation point.

#### Application of regulations

3 (1) These regulations apply to exploration for petroleum, including exploration by a right holder and a person conducting a non-exclusive survey.

(2) Despite subsection (1), these regulations do not apply to the following kinds of exploration:

(a) the drilling of an exploration well, a delineation well, or a development well as they are defined in the Petroleum Resources Regulations;

(b) an operation conducted to determine or evaluate the presence, extent, nature or quality of coal, surface material or water;

(c) prospecting by hand-held implements that, in the opinion of the Administrator, does not cause significant surface disturbance;

(d) operations conducted in the offshore area except for the Donkin coal block, as defined in the Donkin Coal Block Development Opportunity Act (Canada); and Clause 3(2)(d) amended: O.I.C. 2008-143, N.S. Reg. 121/2008.

(e) taking soil, rock or geochemical samples of not more than 20 kg from a sample location.

#### Administrator

4 (1) The Minister shall designate an Administrator to administer these regulations.

(2) All duties and functions of the Minister as prescribed in the Petroleum Resources Act and these regulations with respect to exploration are delegated to the Administrator.

#### Delegation

5 Pursuant to Section 12 of the Energy Resources Conservation Act, the Governor in Council approves the delegation by the Board to the Administrator of the powers, duties or authorities conferred or imposed upon the Board under the Energy Resources Conservation Act to administer and enforce these regulations.

#### Prohibition

6 No person shall explore for petroleum except in accordance with a valid Authority to Explore.

#### Liability

7 (1) Every explorer shall ensure that exploration for petroleum is conducted in a prudent and reasonable manner, consistent with good petroleum exploration practices.

(2) It shall be deemed to be a condition of every Authority to Explore that the explorer agrees to indemnify and save harmless the Province from any and all claims, demands, losses or damages from death, actions or suits that may arise out of or as a result of anything done in the carrying out of exploration conducted under an Authority to Explore.

#### Financial security

8 (1) The Administrator may make an Authority to Explore conditional upon the explorer providing financial security,

(a) in the amount and form specified by the Administrator; and

(b) made payable to the Minister of Finance and Treasury Board or such other person designated by the Administrator.

[Note: The reference to the Minister of Finance has been updated in accordance with Order in Council 2013-348 under the Public Service Act, R.S.N.S. 1989, c. 376, effective October 22, 2013.]

(2) In assessing the need for and fixing the amount of financial security pursuant to subsection (1), the Administrator shall have regard to the content, circumstances and nature of the exploration and the location of the area to be explored.

(3) Where, in the opinion of the Administrator, exploration for which financial security has been furnished under subsection (1) is not being conducted in compliance with the Acts, these regulations or the conditions of the Authority to Explore, the Administrator shall

(a) give notice of non-compliance to the explorer and the explorer shall have 24 hours or such other time period prescribed by the Administrator to remedy the breach, default or non-compliance without forfeiting the financial security;

(b) if, in the opinion of the Administrator, the explorer has not remedied [to] the breach, default or non-compliance after the period specified in clause (a), the financial security will be forfeited to the Province; and

(c) expend such portion of the financial security as is necessary to remedy the breach, default or non-compliance.

(4) When the Authority to Explore has expired or the explorer has given notice that exploration has been completed and the Administrator is satisfied that the explorer has complied with the Acts, these regulations and the Authority to Explore, the Administrator shall refund to the explorer the financial security or such portion of the financial security not expended pursuant to subsection (3).

#### Application for Authority to Explore

9 (1) The Administrator may prescribe a form for an application for an Authority to Explore.

(2) A person may apply for an Authority to Explore by submitting to the Administrator 3 copies of an application and a map on a scale of 1:50 000, or other scale approved by the Administrator,

(a) showing the location of

(i) the area that will be explored by reference to reservations,

(ii) public highways and public roads and other roads and trails that will be used to gain access to the area that will be explored,

(iii) existing cut lines that will be utilized to acquire data during the exploration or to gain access to the area to be explored,

(iv) new cut lines proposed to be cut during the exploration to acquire data or gain access to the area to be explored, and

(v) campsites proposed to be constructed or used during the exploration;

(b) identifying proposed seismic lines on which exploration data is to be acquired by number or letter and showing the relationship of proposed seismic lines to existing wells and previously acquired seismic lines of the applicant; and

(c) including a legend or attachment

(i) indicating to the extent possible the length in kilometres of trails, existing cut lines and new cut lines referred to respectively in subclauses (a)(ii), (iii) and (iv),

(ii) indicating the method, technique and equipment to be employed in the program of exploration,

(iii) stating the name and address of the person who will conduct or authorize the exploration to be undertaken on behalf of the right holder,

(iv) stating whether the equipment to be used in the program of exploration will be tracked, wheeled, or airborne, and

(v) stating the expected dates of commencement and of completion of recording in the field.

(3) An application for an Authority to Explore shall be submitted not less than 45 days before the commencement date of field activities.

(4) An application for an Authority to Explore shall be accompanied by a non-refundable application fee of \$124.65.

Subsection 9(4) amended: O.I.C. 2015-96, N.S. Reg. 98/2015.

(5) The Administrator may bill the applicant for all costs and expenses in excess of \$124.65 incurred directly by the Administrator to process an application and the applicant shall pay the amount before an Authority to Explore is issued.

Subsection 9(5) amended: O.I.C. 2015-96, N.S. Reg. 98/2015.

#### Disposition of application

10 (1) Upon receipt of an application pursuant to Section 9, the Administrator may

(a) require an applicant to submit any additional information that the Administrator considers necessary;

(b) issue an Authority to Explore to the applicant, subject to such terms and conditions as the Administrator prescribes; or

(c) refuse to issue an Authority to Explore to the applicant.

(2) If the Administrator refuses to issue an Authority to Explore, the Administrator shall advise the applicant in writing of the decision together with reasons.

#### Administrator to endorse application

11 (1) Where the Administrator grants an Authority to Explore, the Administrator shall endorse the application submitted pursuant to Section 9 as authorized and return 2 copies to the explorer.

(2) An application submitted pursuant to Section 9 that has been endorsed by the Administrator pursuant to subsection (1) shall constitute an Authority to Explore.

(3) The explorer shall furnish a copy of the Authority to Explore to the crew operating equipment in the field.

(4) The copy referred to in subsection (3) shall be kept at the field headquarters until the exploration is completed.

#### Expiration of Authority to Explore

12 (1) Subject to subsection (2), an Authority to Explore shall be valid for a period of 1 year from the date it is granted.

(2) Upon the completion of exploration field operations under an Authority to Explore, the Authority to Explore is deemed to have expired and no person shall repeat any operations authorized under the Authority to Explore or conduct similar operations.

#### Consent to explore on certain lands

13 (1) An explorer shall not conduct exploration on

(a) lands privately owned or occupied except with the consent of the person having lawful possession of the land or an agent of that person;

(b) lands owned by the Crown in right of the Government of Canada, except with the consent of the appropriate department or agency of the Government of Canada or of a person authorized by the appropriate department or agency to give the consent;

(c) public lands

(i) under the administration of a Minister of the Crown in right of the Province of Nova Scotia, except with the consent of the Minister having the administration of those lands,

(ii) that form part of a public highway or public road except with the consent of the Department of Transportation and Infrastructure Renewal,

(iii) under the administration of an agency, board or commission of the Crown in right of the Province of Nova Scotia, except with the consent of that agency, board or commission, and

(iv) that are occupied, except with the consent of the holder of the disposition to which the lands are subject.

(2) Despite clause (1)(a), where

(a) the exploration to be conducted entails the cutting of trees or the commission of waste on the land; and

(b) the person in lawful possession does not have legal authority to authorize the cutting of the trees or the commission of waste on that land,

no person shall conduct exploration of that land except with the consent of the legal owner of the land or an agent of the legal owner.

(3) Subsections (1) and (2) shall not be construed as removing the necessity to obtain a consent to conduct exploration on any land from any person not referred to in those subsections, if the consent of that person is required by law.

## Obligations under Authority to Explore

### 14 No explorer shall

- (a) conduct exploration except in accordance with the Acts and these regulations;
- (b) conduct exploration otherwise than in accordance with the Authority to Explore; or
- (c) in conducting exploration make a cut line or otherwise cut, destroy or damage forest growth or other natural growth at a location other than where authorized in the Authority to Explore.

### Location of field headquarters

15 (1) The explorer shall inform the Administrator of the location of the field headquarters of the crew conducting the exploration.

(2) The explorer shall inform the Administrator in advance of any change in location of the field headquarters referred to in subsection (1).

### Inspection

16 (1) The explorer shall allow the Administrator or an agent or representative of the Administrator to inspect anything done in relation to the Authority to Explore.

(2) The explorer shall assist the Administrator, agent or representative in carrying out an inspection under subsection (1).

(3) Reasonable costs or expenses incurred by the Administrator, agent or representative under subsections (1) and (2) shall be paid by the explorer.

### Suspension/revocation of Authority to Explore

17 (1) Where the Administrator believes on reasonable and probable grounds that a person

- (a) has contravened or will contravene
  - (i) the Acts,
  - (ii) these regulations,
  - (iii) a term or condition of an Authority to Explore issued to the explorer, or
  - (iv) a provincial or federal enactment; or
- (b) is conducting exploration that has not been authorized by an Authority to Explore,

the Administrator may suspend or terminate the Authority to Explore.

(2) The Administrator shall give the explorer prior notice of the suspension or termination of the Authority to Explore and a reasonable time period to remedy the breach or default.

(3) Immediately upon suspension or termination of an Authority to Explore pursuant to subsection (2), the Administrator shall give notice in writing to the explorer together with reasons for the suspension or termination of the Authority to Explore.

(4) The Administrator may reinstate an Authority to Explore at any time the Administrator considers appropriate to do so.

(5) Despite subsections (2) and (3), if the explorer holds a petroleum right that is suspended or terminated, an Authority to Explore issued to the explorer under these regulations is automatically suspended or terminated with no notice required under these regulations.

#### Reporting

18 (1) During the time when exploration activity is being conducted, the explorer shall at 48-hour intervals provide the Administrator with a verbal summary of

- (a) exploration that has been conducted during the past 48 hours; and
- (b) exploration that is planned for the next 48 hours.

(2) At weekly intervals, an explorer shall provide the Administrator with a written summary of the exploration that has been conducted during the past week.

#### Final plan

19 Within 45 days after completion of the exploration under an Authority to Explore, the explorer shall file with the Administrator a map on a scale of 1:50 000, or other scale approved by the Administrator,

- (a) showing the location of
  - (i) the area that was explored by reference to reservations,
  - (ii) public roads and other roads and trails that were used to gain immediate access to the area that was explored,
  - (iii) existing cut lines that were utilized to acquire data during the exploration, or to gain access to the area to be explored,
  - (iv) new cut lines that were cut during the exploration for the purpose of acquiring data or gaining access to the area that was explored,
  - (v) detours constructed for exploration equipment during the exploration and indicating their length in metres,
  - (vi) campsites constructed or used during the exploration and the size of the campsites,
  - (vii) stations or places at which samples or measurements were obtained or holes were drilled in the course of exploration,
  - (viii) the beginning and the end of each line in the program of exploration and every shothole or sourcepoint in each line in the program and its number, and
  - (ix) locations of all shotholes containing misfired or unexploded charges; and



- (b) showing the name and address of the person who conducted the exploration.

#### Heritage objects

20 If a heritage object is discovered during the course of exploration, the explorer shall suspend operations in the immediate area and shall notify the Administrator and the Nova Scotia Museum of Natural History.

#### Marking of shotholes and sourcepoints

21 (1) An explorer shall mark each sourcepoint or shothole with a weather-resistant tag on which is engraved or impressed in letters at least 0.5 cm high

- (a) the number of the petroleum right issued under the Petroleum Resources Act; and
- (b) the line number and the number of the sourcepoint or shothole.

(2) The tag referred to in subsection (1) shall be

- (a) approximately 6 cm long and 3 cm wide;
- (b) of a conspicuous colour;
- (c) affixed facing the sourcepoint or shothole at a distance of not more than 10 m from the sourcepoint or shothole; and
- (d) on the same side of a road or highway as the sourcepoint or shothole.

(3) No person shall remove a tag installed under these regulations without the written consent of the explorer or the Administrator.

#### Distance restriction for energy source

22 An explorer shall ensure that no person performing exploration under an Authority to Explore conducts a method of exploration within separation distances prescribed by the Administrator.

#### Energy source on roads and highways

23 (1) Subject to subsection (2), no energy source shall be operated on, no hole shall be drilled in, and no trench shall be made on a public highway or public road, except with the written consent of the Department of Transportation and Infrastructure Renewal.

(2) An energy source that does not cause surface damage may be operated on the travelled portion of

(a) a public highway or public road subject to the direction, control and management of the Department of Transportation and Infrastructure Renewal, if the operator has obtained written consent of the Department of Transportation and Infrastructure Renewal;

(b) a public road subject to the direction, control, and management of a municipal authority, if the operator has obtained written consent of the municipal authority.

#### Damage to highways or roads

24 (1) Where an explorer causes damage to, or the loss or destruction of any property related to a public highway or public road, the explorer shall

(a) immediately discontinue those operations or activities that caused the damage, loss or destruction;

(b) give notice of the damage, loss or destruction to

(i) the Department of Transportation and Infrastructure Renewal in the case of a public highway or public road subject to the direction, control and management of that Department, or

(ii) the municipal authority in the case of a public road subject to the direction, control and management of a municipality; and

(c) repair or replace the property so damaged, lost or destroyed.

(2) In subsection (1), “property related to a public highway or public road” or “property” includes

(a) a bridge or culvert forming part of a public highway or public road; or

(b) a sign, structure or traffic control device on the public highway or public road that is used in connection with the construction or maintenance of, or the control of traffic on, the public highway or public road.

#### Flowing holes

25 Where fluids are released from an aquifer or stratum and come to the surface during or after the drilling of a shothole

(a) the drilling of the shothole shall be discontinued;

(b) no explosive charge shall be detonated in the shothole;

(c) the shothole shall be plugged without undue delay so as to confine the fluids to the aquifer or stratum; and

(d) the explorer who has operated or authorized the operation of the exploration equipment used in drilling the shothole shall notify the Administrator immediately, or as soon as practicable, of

(i) the location, including geographical coordinates of the shothole,

(ii) the ground elevation of the shothole,

(iii) the nature of the water or fluids, and

(iv) the depth to each aquifer or petroleum horizon encountered.

#### Provincial survey monuments

26 (1) Where a Provincial survey monument is damaged, destroyed, moved or altered during exploration, the explorer shall

(a) report the matter to the Administrator immediately, or as soon as practicable;

(b) engage a land surveyor to restore, replace or re-establish the survey monument to the specifications set out by the Director of Surveys in the Department of Natural Resources; and

(c) forward a copy of the plan for restoration, replacement or re-establishment to the Director of Surveys in the Department of Natural Resources.

(2) If a survey monument referred to in subsection (1) is not restored, replaced or re-established to the satisfaction of the Director of Surveys of the Department of Natural Resources, the Administrator may

(a) engage a land surveyor to restore, replace or re-establish the survey monument; and

(b) recover the costs or expenses of the restoration, replacement, or re-establishment from the explorer.

#### Information

27 (1) In addition to any other information that must be submitted pursuant to the Petroleum Resources Act and these regulations, an explorer who has conducted exploration pursuant to these regulations shall file with the Administrator, within 12 months after the termination of the field operation, 3 copies of a final report on a form prescribed by the Administrator, and the format and content requirements shall be as prescribed by the Administrator.

(2) Where required by the Administrator, the explorer shall submit data in digital form in a manner approved by the Administrator.

#### Confidentiality

28 (1) Section 72 of the Petroleum Resources Regulations shall apply mutatis mutandis to any exclusive data and information submitted pursuant to Section 27.

(2) Non-exclusive data and information submitted to the Administrator pursuant to Section 27 shall be held confidential by the Administrator for a period of 10 years following the date on which the exploration generating the data was completed.

#### Other laws

29 Nothing in these regulations derogates from any enactment that imposes duties, obligations and responsibilities on the explorer, including, but not limited to, the Occupational Health and Safety Act and its regulations, the Environment Act and its regulations, and the Public Highway Act and its regulations.

#### Marine laws

30 (1) Where an explorer proposes to carry out exploration on or in respect of marine lands, the Administrator may exempt the explorer from any of the provisions of these regulations.

(2) Where the Administrator exempts an explorer from any of the provisions of these regulations pursuant to subsection (1), the Administrator may order that the explorer comply with any provisions of the Nova Scotia Offshore Area Petroleum Geophysical Operations Regulations, as specified in the order, and the Administrator may vary or modify any such provisions to the extent considered necessary by the Administrator.

(3) Where the Administrator orders that an explorer comply with any provisions of the Nova Scotia Offshore Area Petroleum Geophysical Operations Regulations, those provisions shall have the same force and effect as regulations made under the Acts.

Effective date

31 These regulations shall come into force on, from, and after February 23, 2000.

[Note: references to the Department of Transportation and Public Works have been updated throughout in accordance with Order in Council 2007-553 under the Public Service Act, R.S.N.S. 1989, c. 376, effective October 23, 2007.]