# **Regulations and other Acts**

## **M.O.**, 2014

## Order of the Minister of Energy and Natural Resources dated 30 June 2014

Mining Act (chapter M-13.1)

Conditions and requirements governing the exploration work for petroleum, natural gas and underground reservoirs on lands of Île d'Anticosti that are reserved to the State

THE MINISTER OF ENERGY AND NATURAL RESOURCES.

CONSIDERING Arrêté ministériel 2009-033 dated 18 August 2009 (2009, *G.O.* 2, 4646), which provides that a portion of the land on Île d'Anticosti is reserved to the State in accordance with section 304 of the Mining Act (chapter M-13.1);

CONSIDERING the fourth paragraph of section 304 of the Mining Act, which provides that the Minister may allow, by order, on land reserved to the State, mining exploration or mining operations for such mineral substances as are determined by the Minister;

CONSIDERING Arrêté ministériel 2009-033, which determines that, on the land reserved to the State on Île d'Anticosti, only sand, gravel, rocks used as crushed stone, petroleum, natural gas and underground reservoirs may be the object of mining exploration and mining operations;

CONSIDERING that the Order subjects the mining operations on that land to conditions and requirements determined by the Minister;

CONSIDERING that preliminary work to survey and to explore for petroleum, natural gas and underground reservoirs is planned on Île d'Anticosti during the summer 2014;

CONSIDERING the requirement to put in place conditions to warrant the safety and protection of persons, goods and the environment while the operations are conducted;

CONSIDERING that it is necessary to promote development in partnership with communities and integrated into their environment: CONSIDERING that the exploration for petroleum, natural gas and underground reservoirs must be promoted in keeping with the principle of sustainable development;

CONSIDERING that it is expedient to determine the conditions and requirements governing the exploration work for petroleum, natural gas and underground reservoirs on lands of Île d'Anticosti reserved to the State under Minister's Order 2009-033:

CONSIDERING the fifth paragraph of section 304 of the Mining Act which provides that a minister's order made under the fourth paragraph of the section comes into force on the day of its publication in the *Gazette officielle du Québec* or on any later date specified therein;

### ORDERS AS FOLLOWS:

The conditions and requirements governing the exploration work for petroleum, natural gas and underground reservoirs on lands of Île d'Anticosti reserved to the State are those mentioned in Schedule I;

This Minister's Order comes into force on the day of its publication in the *Gazette officielle du Québec*.

Québec, 30 June 2014

PIERRE ARCAND, Minister of Energy and Natural Resources

### SCHEDULE I

Conditions and requirements governing the exploration work for petroleum, natural gas and underground reservoirs on lands of Île d'Anticosti that are reserved to the State

- 1. Only stratigraphic surveys may be carried out by the holder of a licence to explore petroleum, natural gas and underground reservoirs. Such surveys include coring, core sampling, the carrying out of various analyses and the taking of logs.
- 2. The holder of a licence to explore petroleum, natural gas and underground reservoirs who plans to carry out a stratigraphic survey must send to the Minister, for approval, not later than 15 days before the work is to begin,

- (a) a detailed program of the work planned by the licence holder, certified and sealed by an engineer who is a member of the Ordre des ingénieurs du Québec, which must include, in particular, an estimate of the cost of the proposed work, a plan to seal the survey and a site rehabilitation and restoration plan made in accordance with section 232.3 of the Mining Act (chapter M-13.1);
- (b) a mitigation plan showing that the proposed work takes into account the harmonizing of the uses of the territory and mitigate disturbances for local communities and the environment;
- (c) an emergency measure plan and a plan to protect forests against fire;
- (d) a timetable for the road traffic caused by the carrying out of the work indicated in the detailed plan, including the volume of heavy trucks, the duration of the truck's trips, the distances to be covered and a map showing the planned routes.
- 3. The licence holder must demonstrate that the work planned takes into account the regional and local geology so as to assess the risk inherent to the presence of faults or other geological characteristics that could have an impact on the quality of the work in the short, medium and long terms.
- 4. A performance guarantee corresponding to 10% of the estimated cost of the work described in the detailed program must be given to the Minister before the work begins. Such guarantee may take one of the forms provided for in section 16 of the Regulation respecting Apetroleum, natural gas and underground reservoirs (chapter M-13.1, r. 1).
- 5. A certified true copy of a civil liability insurance policy in the amount of \$10,000,000 per disaster, for any damage due to stratigraphic survey operations or the equipment, must be given to the Minister before the work begins and be maintained until the end of the work planned in the rehabilitation and restoration plan.
- 6. The collar of a stratigraphic survey may not be placed
  - (a) in a zone at risk of ground movement;
- (b) less than 100 metres from the limits of the land covered by the licence where the stratigraphic survey is carried out or less than 400 metres, if the stratigraphic survey is carried out on immersed land;
  - (c) less than 100 metres from the high water mark;

- (d) less than 100 metres from route Transanticostienne;
- (e) less than 500 metres from any public immovable;
- (f) less than 1,000 metres from an airport.
- 7. The licence holder must, for each stratigraphic survey, make sure that the work is carried out so as to optimize the quality and safety of all aspects connected to the design, construction, cementing, work integrity control and the sealing of the survey. To that effect, the licence holder must
- (a) use, during work that leads to the installation of the surface casing, a system making it possible to safely control the arrival of fluids;
- (b) plan for a minimum 24-hour setting time for the cementation of the surface casing before resuming all the work related to the survey;
- (c) use, for the work carried out after the surface casing is installed, a blowout prevention system having at least 3 blocking mechanisms designed to resist to the various pressures as anticipated in the detailed work program;
- (d) use a piping system with the blowout prevention system enabling the fluids coming up to be directed to leakproof tanks and, in the case of gas, to a flare, a flare pit or any other equipment designed to reduce the emission of contaminants into the atmosphere;
  - (e) check the blowout prevention system every 24 hours;
- (f) use equipment, components, casing or piping that can resist to the various pressures indicated in the detailed program for the work and resist to the blowing up, crushing, tension constraints and other constraints to which they might be subjected;
- (g) pressure test the tightness of equipment, components, casing or piping at the time they are installed;
- (h) fix a surface casing at a depth greater than 10% of the maximum depth of the survey and at a minimum depth of 30 metres under the base of the aquifer;
- (i) carry out the cementation using an appropriate method and appropriate cement and ensure that a part of the poured cement comes to the surface through the annular space;
- (*j*) plan for a quantity of excess cement corresponding to at least 25% of the volume to be used, calculated at the time of cementation;

- (k) carry out pressure test of the tightness of the survey before resuming operations;
- (1) make sure that all geological horizons met containing water, petroleum or gas are isolated and prevent migration from a geological horizon to another;
- (m) carry out trajectory deviation surveys at intervals that ensure that the stratigraphic survey maintains its trajectory.
- 8. The licence holder must, for each stratigraphic survey, keep and maintain on the site the daily report of operations referred to in section 46 of the Regulation respecting petroleum, natural gas and underground reservoirs, adapted as required. A copy of that report is to be sent to the Minister weekly.
- 9. The licence holder must carry out, during the work and at the end of the work, the logs required to ensure the quality of the work and the acquisition of knowledge.
- 10. Should gas or petroleum come to the surface, the licence holder must notify the Minister without delay and proceed with the sampling and analysis of the hydrocarbons found.
- 11. The licence holder must, once the survey is finished, seal by cementation over all the length and proceed with the restoration and rehabilitation of the site in accordance with the plans approved by the Minister.
- 12. The licence holder must, within 30 days of the end of the work to seal the survey, file a declaration stating the existence and location of the survey collar in the land register and send a copy thereof to the Municipalité de L'Île-d'Anticosti as soon as the declaration is recorded.
- 13. The licence holder must send to the Minister, within 90 days of the end of the work to seal the survey
- (a) the report referred to in section 48 of the Regulation respecting petroleum, natural gas and underground reservoirs, adapted as required. The report must be certified and sealed by an engineer who is a member of the Ordre des ingénieurs du Québec;
  - (b) the result of all the analyses made;
- (c) a paper copy and a copy in .LAS format of all logs carried out and their interpretations.
- 14. The licence holder must send to the Minister, as soon as their analysis is completed, at least half of the cores collected, cut lengthwise, and the result of the analyses made.

- 15. The licence holder must, for a period of 5 years following the sealing of the stratigraphic survey, inspect the site yearly and report to the Minister before the anniversary date of the sealing work. The report, certified and sealed by an engineer who is a member of the Ordre des ingénieurs du Québec, must demonstrate that the condition of the site ensures the safety of persons, property and the environment.
- 16. No perforation, stimulation or fracturing work, no drill-stem testing and no extraction testing for petroleum or natural gas may be carried out on the stratigraphic surveys carried out on lands of Île d'Anticosti that are reserved to the State.

3408