Persons wishing to comment on this draft regulation may write, before the expiry of the 45-day period mentioned above, to the undersigned, the Minister of Health and Social Services, at 1075, chemin Sainte-Foy, 15° étage, Québec (Québec) GIS 2M1.

GAÉTAN BARRETTE, Minister of Health and Social Services

Regulation to amend the Regulation respecting the application of the Health Insurance Act

Health Insurance Act (chapter A-29, s. 69, 1st par., subpars. b and b.1)

- **1.** The Regulation respecting the application of the Health Insurance Act (chapter A-29, r. 5) is amended by replacing subparagraph q of section 22 by the following subparagraph:
- "(q) ultrasonography, except in one or the other of the following cases:
- i. this service is rendered in a facility maintained by an institution which operates a hospital centre;
 - ii. this service is rendered by a radiologist;
- iii. this service is rendered, for obstetrical reasons, in a facility maintained by an institution which operates a local community service centre referred to in Schedule D;".
- **2.** That Regulation is amended by adding, at the end of subparagraph *q*.3 of section 22, the following:
- ", macular edema caused by vein occlusion, diabetic macular edema, retinopathy of prematurity, malignant myopia, neovascular glaucoma or neovascular diabetic retinopathy".
- **3.** This Regulation comes into force on the 15th day following the date of its publication in the *Gazette officielle du Québec*.

102682

Draft Regulation

Mining Act (chapter M-13.1)

Petroleum, natural gas and underground reservoirs — Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Regulation to amend the Regulation respecting petroleum, natural gas and underground reservoirs, appearing below, may be made by the Government on the expiry of 45 days following this publication.

The draft Regulation updates the conditions, obligations and technical requirements associated with the well drilling, completion and conversion licences, the authorizations to close temporarily or permanently a well and the restoration and rehabilitation of sites. It will increase the safety of persons and property and protect the environment.

Study of the matter shows that the draft Regulation will have an impact on enterprises that hold an exploration licence for petroleum, natural gas and underground reservoirs who will have to send more information to the Minister of Energy and Natural Resources both for applications for a licence or an authorization and for reports at the end of the work. The additional requirements do not represent a significant burden. There is no impact on the public and on other enterprises.

Further information on the draft Regulation may be obtained by contacting MarieEve Bergeron, Director, Bureau des hydrocarbures, Ministère de l'Énergie et des Ressources naturelles, 5700, 4° Avenue Ouest, bureau A-422, Québec (Québec) G1H 6R1; telephone: 418 6276385, extension 8131; toll free: 1 800 363-7233, extension 8131; fax: 418 644-1445; email: marieeve.bergeron@mern.gouv.qc.ca

Any person wishing to comment on the matter is requested to submit written comments within the 45-day period to Luce Asselin, Associate Deputy Minister for Energy, Ministère de l'Énergie et des Ressources naturelles, 5700, 4° Avenue Ouest, bureau A-407, Québec (Québec) G1H 6R1.

PIERRE ARCAND, Minister of Energy and Natural Resources and Minister responsible for the Plan Nord

Regulation to amend the Regulation respecting petroleum, natural gas and underground reservoirs

Mining Act (chapter M-13.1, s. 306, pars. 2, 5, 15, 16, 26.1 and 26.2)

- **1.** The Regulation respecting petroleum, natural gas and underground reservoirs (chapter M-13.1, r. 1) is amended in section 1
- (1) by striking out the definitions of "drilling rig", "mechanical packer", "wireline log", "pump and plug method", "injection well", "enhanced recovery", "intermediate casing" and "production tubing";
- (2) by inserting the following definition in alphabetical order:
- ""fracturing" means an operation that creates fractures in the geological formation by injecting a fluid under pressure through wells;".

2. Section 15 is amended

- (1) by replacing "proposed drilling" at the end of subparagraph 1 of the second paragraph by "collar of the proposed drilling and the downhole";
- (2) by inserting the following after subparagraph 2 of the second paragraph:
 - "(2.1) a site preparation and infrastructure plan;";
- (3) by replacing subparagraphs 3 to 6 of the second paragraph by the following:
- "(3) a drilling program certified by an engineer indicating
- (a) the type of drilling rig that will be used to carry out the operations and its specifications;
- (b) a process diagram describing material flows and equipment used in the drilling process with their data sheets;
- (c) a chronological description of the technical operations to be carried out during drilling;
- (d) a graphic projection of the formation pressure to the total planned depth;
- (e) a graphic projection of the deviation and the drilling angle to the total planned depth;

- (f) a longitudinal section indicating the proposed mechanical conditions of the well;
- (g) the technical demonstration that the equipment, components or casings can resist any bursting, crushing, tension and any other physical stress to which they may be subjected;
- (h) the technical demonstration that the depth of the installation of the surface casing allows it to resist stress encountered;
- (i) the technical demonstration that the casings and their cementation prevent the communication of fluids from one geological horizon to another;
- (*j*) a casing cementation program providing in particular the installation method used, the type of cement, the setting time, the quantity of cement including the calculation of the excess, the additives and the method used to verify the application of the cement;
- (k) a test program to ensure tightness of equipment, components and casings during their installation;
- (1) the method used to verify the tightness of the drilling following cementation;
- (m) the method used to demonstrate that all geological horizons, faults and fractures encountered containing water, petroleum or gas are isolated and prevent the communication of fluids from one geological horizon to another;
- (n) the method used to ensure maintenance of the borepath or the path of re-entry including the frequency and interval of path deviation surveys;
- (o) the demonstration that the technical aspects take into account the presence of wells already drilled, the local and regional geology and the separation distances provided for in the Water Withdrawal and Protection Regulation (chapter Q-2, r. 35.2);
- (p) a gas sampling and analysis program during the drilling to establish a link between the characteristics of the gases, the geological formations and the depths;
- (q) the list of the logs planned during and after the work;
 - (r) the list of analyses planned on cores and cuttings;
- (s) the technical demonstration that the proposed work complies with the best practices generally recognized to ensure the safety of persons and property, the protection of the environment and the optimum recovery of the resource;

- (t) the names and contact information of the person responsible for the drilling work and of the engineer charged with supervising the work; and
 - (u) an estimate of the cost of the proposed work;
- "(4) a geological projection, certified by a geologist or an engineer, including
- (a) a stratigraphic column showing the projected horizons and their thickness;
- (b) the description of the geological model and anticipated hydrocarbons; and
- (c) an interpreted seismic profile indicating the top of geologic formations, the shotpoint corresponding to the drilling location, the projected drilling deviation to its total depth, and the location of projected objectives of primary and secondary hydrocarbons;
- "(5) a program of evaluation of the well certified by an engineer indicating the nature of the gas detecting system, the different core zones and the drill-stem test program;
- "(6) a mitigation plan showing that the proposed work takes into account the harmonization of land use and minimizes disturbances for local communities and the environment:
- "(7) a schedule of the road traffic caused by the proposed work, including the volume of heavy trucking and the period in which it will take place and a map showing the planned routes;
- "(8) an assessment of the risks associated with the proposed work and a plan for the management of those risks;
- "(9) an emergency measures plan indicating the prevention and intervention measures in case of an accident or fire:
- "(10) a communication plan for local communities covering the whole period of the work;
- "(11) any other information deemed necessary by the Minister; and
 - "(12) payment of the fee in the amount of \$4,393.";
 - (4) by replacing the last paragraph by the following:

- **3.** Section 16 is amended by striking out "; however, it may not be less than \$5,000 or more than \$150,000" in the portion preceding paragraph 1.
- **4.** Section 17 is replaced by the following:
- **"17.** The application must be submitted with a certified copy of the following insurance policies:
- (1) a civil liability insurance policy in the amount of \$2,000,000 for any damage caused by the work or the equipment;
- (2) a pollution insurance policy in the amount of \$2,000,000;
- (3) a well control insurance policy in the amount of \$10,000,000:
- (4) an umbrella insurance policy in the amount of \$8,000,000.".
- **5.** The following is inserted after section 17:
- "17.1. The well drilling licensee must immediately notify the Minister where one of the following events occurs as part of the drilling:
 - (1) damage to the integrity of the well;
 - (2) an unexpected drop of pressure;
- (3) any other incident likely to have an impact on the safety of persons or property or on the protection of the environment.

The notice must indicate the corrective measures taken or those planned and their schedule.".

6. Section 18 is amended

- (1) by replacing "the liability insurance policy required" in the first paragraph by "the insurance policies required";
- (2) by replacing the second, third and fourth paragraphs by the following:

"The amount of the performance guarantee is revised upon an application for a well completion licence and an application for a well conversion licence to take into account the new work. Where the amount of the guarantee provided under section 16 is less than the revised amount, an additional guarantee must be submitted with the application for a well completion licence and the application for a well conversion licence."

7. Section 19 is amended by adding the following paragraph at the end:

"Drilling work commences when the activities concerning the installation of the initial casing begin.".

- **8.** Section 20 is amended by replacing "thereof in writing" at the end of the second paragraph by "in writing of the new commencement date or of the licensee's intention not to proceed with the work".
- **9.** Section 21 is amended by replacing "the drilling engineer responsible for carrying out the operations" in the second paragraph by "an engineer".

10. Section 22 is amended

- (1) by striking out ", any dwelling or public building" in paragraph 1;
 - (2) by replacing paragraph 2 by the following:
- "(2) less than 100 m from a cemetery, a national park or a protected area;";
 - (3) by inserting the following after paragraph 3:
- "(3.1) less than 160 m from a wind turbine, an electrical tower or a telecommunication infrastructure;
- "(3.2) less than 180 m from a high-capacity dam as defined in the Dam Safety Act (chapter S-3.1.01);
 - "(3.3) less than 500 m from any dwelling or building;
- "(3.4) less than 600 m on either side of the grinding zone of the Jupiter fault located on île d'Anticosti;";
 - (4) by adding the following after paragraph 7:
- "(8) in an area where ground movement is likely to occur.".

11. Section 23 is amended

- (1) by inserting "and maintaining" after "when drilling";
 - (2) by adding the following paragraph at the end:

"The well drilling licensee must also use, for work carried out after the installation of the surface casing, a blowout prevention system including at least 3 different sealing mechanisms designed to resist to the various pressures projected in the drilling program."

- **12.** The following is inserted after section 23:
- "23.1. In the case of petroleum or gas influx, the well drilling licensee must immediately so inform the Minister in writing and sample and analyze the hydrocarbons encountered.

In all cases, the analyses will have to quantify hydrogen sulphide. In the case of natural gas influx, the analyses will have to characterize in particular the carbon isotope ratio in the methane. In the case of petroleum influx, they will have to characterize in particular the viscosity and density.".

- **13.** Sections 24 to 28 are revoked.
- **14.** Section 29 is amended by adding the following paragraph at the end:

"The well drilling licensee must send a written notice to the Minister as soon as each cementation operation is completed. The notice must assess the quality of the cementation in relation to the integrity of the well and, in the case of failure, indicate corrective work that will be carried out."

- **15.** Sections 33 and 34 are revoked.
- **16.** Section 37 is amended by replacing "and the section of the well sampled" in the second paragraph by ", the depth and geological formation they come from".
- **17.** Section 38 is replaced by the following:
- "38. A well drilling licensee must, for each core collected while drilling a well, analyze samples in order to determine its porosity and its permeability. The samples must be collected at an interval of at least 100 m in the targeted horizons and in the units associated with gas or petroleum influx.

"The well drilling licensee sends to the Minister the results of the sample analyses as soon as they are completed.".

- **18.** Section 39 is replaced by the following:
- "39. A well drilling licensee submits to the Minister at least half the core as soon as the sample analysis is completed or, otherwise, not later than 1 year after the end of the drilling.

The core must be cut lengthwise and the drilling licensee must indicate the name of the well, the interval and the geological formation it comes from and its top and basis.

The Minister may grant an additional time period for submitting the cores or exempt the licensee from doing so.".

- **19.** Section 40 is revoked.
- **20.** Section 43 is amended by adding the following paragraph at the end:

"The analysis of the sampled gas must include hydrogen sulphide (H,S).".

21. Section 46 is amended

- (1) by replacing paragraph 4 by the following:
- "(4) a description of the activities carried out in chronological order and the time spent on them by the drilling crew;";
 - (2) by replacing paragraph 11 by the following:
 - "(11) the rate of penetration;";
 - (3) by inserting ", brine" after "oil" in paragraph 14;
 - (4) by inserting the following after paragraph 16:
- "(16.1) the composition, concentration and detailed overview of all the products stored and used on the site, in particular the drilling mud;
 - "(16.2) the proposed work for the next 24 hours;
- "(16.3) the burning activities and an estimate of the volume of burnt gas;";
- (5) by adding the following subparagraph at the end of paragraph 18:
- "(i) if applicable, the presence of freezing spray or any other operating condition likely to have an impact on the safety of property or persons or on the protection of the environment, and mitigation measures used.".
- **22.** Section 47 is amended by replacing "once a week" by "every 48 hours".

23. Section 48 is amended

- (1) by inserting "be signed by an engineer and" after "must" in the portion preceding subparagraph 1 of the first paragraph;
- (2) by replacing subparagraphs 1 and 2 of the first paragraph by the following:

- "(1) the name of the well and its number as it appears on the drilling licence;
- "(1.1) the final coordinates of the drilling collar and the downhole:
- "(1.2) a summary of the activities carried out during the work;
- "(2) a technical description of the state of the well including a longitudinal section indicating the mechanical conditions of the well after the drilling;";
- (3) by replacing subparagraphs 5 and 6 of the first paragraph by the following:
- "(5) results of the well evaluation tests including in particular the analysis made in respect of the projected objectives of primary and secondary hydrocarbons;
- "(6) a copy of the interpreted logs and results of the analyses and studies related to them. The log data must be recorded according to the Log ASCII standard format of logging information commonly called the LAS format;";
 - (4) by replacing the second paragraph by the following:

"The electronic version of the documents must also be sent to the Minister.".

24. Section 49 is replaced by the following:

"49. An application for a well completion licence must be submitted to the Minister at least 30 days before the date of commencement of the completion work using the form in Schedule III.

The application must be accompanied by the following documents:

- (1) a cadastral map or, if none, a topographical map, scale 1:20 000, illustrating the location of the drilling collar and the downhole;
 - (2) a site preparation and infrastructure plan;
- (3) a completion program certified by an engineer indicating
- (a) the name of the well and its number as it appears on the well drilling licence;
 - (b) a description of the type of well;
- (c) the type of equipment that will be used for the work and its specifications;

- (d) a process diagram describing material flows and equipment used in the process with their data sheets;
- (e) a technical description of the state of the well including a longitudinal section indicating the mechanical conditions of the well before completion and those expected after completion;
- (f) the technical demonstration that the equipment, components or casings can resist any bursting, crushing, tension and any other physical stress to which they may be subjected;
- (g) any casing cementation program providing in particular the installation method used, the type of cement, the setting time, the quantity of cement including the calculation of the excess, the additives and the method used to verify the application of the cement;
- (h) a test program to ensure tightness of equipment, components and casings during their installation;
- (i) a chronological description of the technical operations carried out during completion;
- (j) perforation intervals, intervals that will be the subject of the completion work, their locations and their vertical depth;
- (k) the demonstration that the techniques used will allow to maintain the integrity of the well;
- (1) the demonstration that the technical aspects take into account the presence of wells already drilled and the local and regional geology;
 - (m) the list of logs planned during and after the work;
- (n) a program for the verification and follow-up of the integrity of the well during and after the work;
- (o) the demonstration that the work will comply with the best practices generally recognized to ensure the safety of persons and property, the protection of the environment and the optimum recovery of the resource;
- (p) the names and contact information of the person responsible for the completion work and of the engineer in charge of supervising the work; and
 - (q) an estimate of the cost of the proposed work;
- (4) a mitigation plan showing that the proposed work takes into account the harmonization of land use and minimizes disturbances for local communities and the environment:

- (5) a schedule of the road traffic caused by the proposed work, including the volume of heavy trucking and the period in which it will take place and a map showing the planned routes;
- (6) an assessment of the risks associated with the proposed work and a plan for the management of those risks;
- (7) an emergency measures plan indicating the prevention and intervention measures in case of an accident or fire;
- (8) a communication plan for local communities covering the whole period of the work;
- (9) any other information deemed necessary by the Minister; and
 - (10) payment of the fee in the amount of \$2,555.

Where the completion work covers the physical stimulation by hydraulic fracturing, the completion program must also include

- (1) an injectivity test program allowing to establish the fracturing parameters or a demonstration that the program is not required;
- (2) a work follow-up program including the total volumes injected and pressures used;
- (3) the demonstration that the proposed work takes into account the separation distances provided for in the Water Withdrawal and Protection Regulation;
- (4) stimulation intervals, the number of fracturing steps and their identification and the vertical depth of the intervals in the well;
- (5) the composition, structure and geomechanical behaviour of the host rock body covered by the work and those that are underlying;
- (6) a 3-D assessment of fracture propagation and the description of the method used for that assessment;
- (7) an assessment of the induced seismicity risk and a description of the microseismic follow-up that will be performed stating the nature of the data that will be collected and the duration of the observation period and including a monitoring program and mitigation and intervention measures;
- (8) the determination of operating parameters to be met during the work, the pressure and volume that must not be exceeded in particular to avoid damage to the equipment, well or geological formations by fracture propagation to a preferential fluid flow path;

- (9) the name, volume, composition, concentration and function of all products stored and used on the site including the fluid injected and the proppant, and the safety data sheet for each product; and
- (10) a plan for the management of the use of surface water, underground water and waste water concerning the transportation, storage, handling and disposal.

Where completion work concerns cleaning or stimulation by chemical processes, the completion program must also include

- (1) a work follow-up program including the total volumes injected and the pressures used;
- (2) the composition, structure and geomechanical behaviour of the geological formations concerned and those that are underlying;
- (3) the determination of operating parameters to be met during the work, the pressure and volume that must not be exceeded in particular to avoid damage to the equipment, well or geological formations by fracture propagation to a preferential fluid flow path;
- (4) the name, volume, composition, concentration and function of all products stored and used on the site including the safety data sheet for each product.

The electronic version of the documents must also be sent to the Minister.".

25. The following is inserted after section 50:

- **"50.1.** A well completion licensee must immediately notify the Minister where one of the following events occurs as part of the completion:
 - (1) damage to the integrity of the well;
- (2) an unexpected drop of the pressure generated by the fluids injected;
- (3) any other incident likely to have an impact on the safety of persons or property or on the protection of the environment.

The notice must indicate the corrective measures taken or those planned with their schedule.".

26. Section 52 is replaced by the following:

"52. Where the well completion licensee is unable to meet the date for commencement of the operations as projected in the application for a well completion licence

prescribed in Schedule III, the licensee must notify the Minister in writing, not less than 15 days prior to the projected date, of the delay and the reasons therefor.

The licensee must also, not less than 15 days prior to the new commencement date, inform the Minister in writing of the new commencement date or of the licensee's intention not to proceed with the work.

The well completion licensee must also inform the Minister in writing, not less than 15 days before commencing the maintenance work, of the projected date for the work and the nature of that work.".

27. The following is inserted after section 52:

- "52.1. A well completion licensee must use, until the completion work is temporarily or permanently stopped, a blowout prevention system including at least 3 different sealing mechanisms or a wellhead designed to resist to the various pressures projected in the completion program.
- "52.2. A well completion licensee must prepare and keep on the drilling site a daily report of drilling.
- "52.3. The daily report under section 52.2 must contain all the information collected concerning operations carried out during the completion of the well, in particular
- (1) the dates of the commencement and end of the completion work;
- (2) the name of the contractor carrying out the completion;
- (3) a description of the activities carried out in chronological order and the time spent by the completion crew on the activities;
- (4) a summary of the working condition of the blowout prevention equipment;
 - (5) the type of pump used and its capacity;
- (6) if applicable, the type of cement used, giving its density, the nature of its additives and the quantity used;
 - (7) mention of any trace of gas, oil or water in the well;
 - (8) results of pressure tests;
- (9) if applicable, the reasons for the loss of any casing or other equipment in the well together with a description of fishing operations;

- (10) a description of the well closing procedure used, where completion is stopped temporarily or permanently;
- (11) the composition, concentration and detailed overview of all products stored and used on the site;
 - (12) the proposed work for the next 24 hours;
- (13) if applicable, the burning activities and an estimate of the volume of burnt gas; and
- (14) the assessment of fracture propagation based on the observations and measures made related with the projections, the integrity of the well and, in the case of failures, the corrective work proposed.

- **"52.4.** A well completion licensee must, every 48 hours, submit to the Minister a copy of each daily report completed until the completion work is stopped temporarily or permanently.".
- **28.** Sections 53 and 54 are revoked.
- **29.** The following is added after section 54:
- "54.1. The report that the well completion licensee sends to the Minister under the second paragraph of section 162 of the Act must be signed by an engineer and contain
- (1) the name of the well and its number as it appears in the completion licence;
 - (2) a summary of the activities related to the work;
- (3) a description of the state of the well including a longitudinal section indicating the mechanical conditions of the well after completion;
- (4) a copy of the interpreted logs and results of the analyses and studies related to them. The log data must be recorded according to the Log ASCII standard format of logging information commonly called the LAS format;
 - (5) analyses of gas, oil or water recovered;
- (6) data collected during completion activities, including the mapping of any microseismic events recorded and the interpretation of all the data;
- (7) if applicable, the follow-up of incidents that have been reported under section 50.1; and

(8) a comparison of the results obtained following completion in relation to those anticipated and the analysis made.

The electronic version of the documents must also be sent to the Minister.".

- **30.** Sections 56 and 57 are replaced by the following:
- **"56.** Application for a well conversion licence must be submitted to the Minister at least 30 days before the date on which conversion work is to commence.

The application must be accompanied by

- (1) a cadastral map or, if none, a topographical map, scale 1:20 000, illustrating the location of the drilling collar and the downhole;
 - (2) a site preparation and infrastructure plan;
- (3) a conversion program certified by an engineer indicating
- (a) the name of the well and its number as it appears on the well drilling licence;
 - (b) a description of the type of well;
- (c) the type of equipment that will be used for the work and its specifications;
- (d) a description of the conversion activities and the reasons therefor;
- (e) a process diagram describing material flows and equipment used in the process with their data sheets;
- (f) a description of the state of the well including a longitudinal section indicating the mechanical conditions of the well existing before the conversion and those expected after;
- (g) the technical demonstration that the equipment, components or casings can resist any bursting, crushing, tension and any other physical stress to which they may be subjected;
- (h) if applicable, a casing cementation program providing in particular the installation method used, the type of cement, the setting time, the quantity of cement including the calculation of the excess, the additives and the method used to verify the application of the cement;
- (i) a test program to ensure tightness of equipment, components and casings during their installation;

- (j) a chronological description of the technical operations performed during the conversion;
- (k) the intervals that will be the subject of conversion work, their locations and their vertical depth;
- (1) the demonstration that the techniques used will allow to maintain the integrity of the well;
- (m) the demonstration that the technical aspects take into account the presence of wells already drilled and the local and regional geology;
 - (n) the list of logs planned during and after the work;
- (o) a program for the verification and follow-up of the integrity of the well during and after the work;
- (p) the demonstration that the work will comply with the best practices generally recognized to ensure the safety of persons and property, the protection of the environment and the optimum recovery of the resource;
- (q) the names and contact information of the person responsible for the conversion work and of the engineer charged with supervising the work; and
 - (r) an estimate of the cost of the proposed work;
- (4) a mitigation plan showing that the proposed work takes into account the harmonization of land use and minimizes disturbances for local communities and the environment:
- (5) a schedule of the road traffic caused by the proposed work, including the volume of heavy trucking and the period in which it will take place and a map showing the planned routes;
- (6) an assessment of the risks associated with the proposed work and a plan for the management of those risks;
- (7) an emergency measures plan indicating the prevention and intervention measures in case of an accident or fire;
- (8) a communication plan for local communities covering the whole period of the work;
- (9) any other information deemed necessary by the Minister; and
 - (10) payment of the fee in the amount of \$2,043.

"57. A well conversion licensee must comply with the well conversion program required under section 56.

The licensee may modify the well conversion program by submitting to the Minister, beforehand, a supplementary agreement certified by an engineer, stating the nature of the modification as well as the reasons therefor.".

- **31.** The following is inserted after section 57:
- **"57.1.** A well conversion licensee must immediately notify the Minister where one of the following events occurs as part of the conversion:
 - (1) damage to the integrity of the well;
- (2) an unexpected drop of the pressure generated by the fluids injected;
- (3) any other incident likely to have an impact on the safety of persons or property or on the protection of the environment.

The notice must indicate the corrective measures taken or those planned and their schedule.

"57.2. Where the well conversion licensee is unable to meet the date for commencement of the operations as projected in the application for a well conversion licence, the licensee must inform the Minister in writing, not less than 15 days prior to the projected date, of the delay and the reasons therefor.

The licensee must also, not less than 15 days prior to the new commencement date, inform the Minister in writing of the new date or of the licensee's intention not to proceed with the work.

The well conversion licensee must also inform the Minister in writing, not less than 15 days before commencing the maintenance work, of the projected date for the work and the nature of that work.

- "57.3. A well conversion licensee must use, until the conversion work is temporarily or permanently stopped, a blowout prevention system including at least 3 different sealing mechanisms or a wellhead designed to resist to the various pressures projected in the conversion program.
- "57.4. A well conversion licensee must prepare and keep on the work site a daily report of the work.
- **"57.5.** The daily report mentioned in section 57.4 must contain all the information collected concerning the operations performed during the conversion of the well, in particular

- (1) the dates of the commencement and end of the conversion work:
- (2) the name of the contractor carrying out the conversion work:
- (3) a description of the activities carried out in chronological order and the time spent by the conversion crew on those activities;
- (4) a summary of the working condition of the blowout prevention equipment;
 - (5) the type of pump used and its capacity;
- (6) if applicable, the type of cement used by specifying its density, the nature of the additives and the quantity used;
 - (7) mention of any trace of gas, oil or water in the well;
 - (8) results of pressure tests;
- (9) if applicable, the reasons for the loss of any casing or other equipment in the well together with a description of fishing operations;
- (10) a description of the well closing procedure used, where conversion is stopped temporarily or permanently;
- (11) the composition, concentration and detailed overview of all the products stored and used on the site;
 - (12) the proposed work for the next 24 hours; and
- (13) if applicable, the burning activities and an estimate of the volume of burnt gas;

- **"57.6.** A well conversion licensee must, every 48 hours, submit to the Minister a copy of each daily report completed until the conversion work is stopped temporarily or permanently.
- "57.7. The report that a well conversion licensee sends to the Minister under the second paragraph of section 162 of the Act must be signed by an engineer and contain
- (1) the name of the well and its number as it appears on the conversion licence;
 - (2) a summary of the activities related to the work;

- (3) a description of the state of the well including a longitudinal section indicating the mechanical conditions of the well after the conversion;
- (4) a copy of the interpreted logs and results of the analyses and studies related to them. The log data must be recorded according to the Log ASCII standard format of logging information commonly called the LAS format;
 - (5) analyses of the gas, oil or water recovered;
- (6) if applicable, the follow-up of incidents that have been reported under section 57.1; and
- (7) a comparison of the results obtained following the conversion in relation to those anticipated and the analysis made.

The electronic version of the documents must also be sent to the Minister.

"57.8. A well conversion licensee must, where conversion work is temporarily or permanently stopped, comply with the well closing conditions provided for in Division IV.".

32. Section 59 is amended

- (1) by striking out "and be accompanied by the closing program signed by an engineer who can prove training or experience in drilling" at the end of the first paragraph;
 - (2) by inserting the following after the first paragraph:

"The application must be accompanied by

- (1) a cadastral map or, if none, a topographical map, scale 1:20 000, illustrating the location of the drilling collar and the downhole;
 - (2) a site preparation and infrastructure plan;
- (3) a closing program certified by an engineer indicating
- (a) the name of the well and its number as it appears on the well drilling licence;
 - (b) a description of the type of well;
- (c) the type of equipment that will be used to carry out the work and its specifications;
- (d) a description of the state of the well including a longitudinal section indicating the mechanical conditions of the well existing before the closing and those expected after the closing;

- (e) the technical demonstration that the equipment, components or casings can resist any bursting, crushing, tension and any other physical stress to which they may be subjected;
- (f) a casing cementation program providing in particular the installation method used, the type of cement, the setting time, the quantity of cement including the calculation of the excess, the additives and the method used to verify the application of the cement;
- (g) a test program to ensure tightness of equipment, components and casings during their installation;
- (h) a chronological description of the technical operations performed during the closing;
- (i) the intervals that will be the subject of the closing work:
- (j) the well parameters used to establish the closing method, the analysis of it and a description of the method used to close the well:
- (k) the method used to measure the flow at the vent and the study of gas migration;
 - (1) the list of logs planned during and after the work;
- (m) a program for the verification and follow-up of the integrity of the well during and after the work;
- (n) the demonstration that the work will comply with the best practices generally recognized to ensure the safety of persons and property and the protection of the environment;
- (*o*) the names and contact information of the person responsible for the closing work and of the engineer who is charged with supervising the work; and
 - (p) an estimate of the cost of the proposed work;
- (4) a mitigation plan showing that the proposed work takes into account the harmonization of land use and minimizes disturbances for local communities and the environment;
- (5) a schedule of the road traffic caused by the proposed work, including the volume of heavy trucking and the period in which it will take place and a map showing the planned routes;

- (6) an assessment of the risks associated with the proposed work and a plan for the management of those risks;
- (7) an emergency measures plan indicating the prevention and intervention measures in case of an accident or fire;
- (8) a communication plan for local communities covering the whole period of the work; and
- (9) any other information deemed necessary by the Minister.

In the case of an application for the authorization to close temporarily a well, the application must also be accompanied by

- (1) a follow-up and inspection program covering the entire period of closing, including in particular photographs of the site, of the grading cellar and the wellhead as well as a description of the verifications and measures that will be used to assess the integrity of the well and its safety; and
- (2) a demonstration that, prior to the work to close temporarily a well, the following conditions were met:
 - (a) at the casing vent:
- i. the stabilized flow must be less than 150 cubic metres per day (m³/day);
- ii. if there is an emanation, it must be composed only of gas;
- iii. if the emanation contains hydrogen sulphide (H₂S), the concentration of the contaminant must be less than 6 ug/m³ for a duration of 4 minutes;
- (b) the emanation must not come form a failure of an O ring or a casing;
- (c) the emanation must not constitute a risk for the safety of persons or property and the protection of the environment;
- (d) the stabilized closing pressure must be less than half the pressure in the open hole at the elevation of the shoe of the surface casing shoe or 11 kPa/m multiplied by the depth of the surface casing in metres;
- (e) there is no migration of gas or the migration does not constitute a risk to the safety of persons and property and the protection of the environment.

In the case of an application for the authorization to close permanently a well, the application must also be accompanied by the demonstration that, prior to the permanent closing work, there is no emanation at the surface vent and no migration of gas or the migration does not constitute a risk to the safety of persons and property and the protection of the environment. If the flow at the surface casing vent is assessed by a bubble point test, the test must be conducted in accordance with the following procedure:

- (1) ensure that there is no gas leak on the fittings and welds of the surface casing vent and that the valves on the vent pipe are open;
- (2) connect a pipe whose inside diameter is at least 6 mm and not more than 12 mm with the required fittings on the surface casing vent to direct gas flow in a container of water of a volume between 500 mL and 1 litre;
- (3) submerge the pipe into the container of water at 2.5 cm under the surface of the water;
- (4) observe for 10 minutes and, if there is presence of bubbles, determine the gas flow and stabilized pressure at the vent.":
 - (3) by adding the following paragraph at the end:

"The electronic version of the documents must also be sent to the Minister.".

- **33.** The following is inserted after section 59:
- **"59.1.** An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must inform the Minister in writing of the date of the well closing work at least 15 days before the work commences.
- **"59.2.** An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must, when closing a well, comply with the well closing program provided for in section 59.

The licensee or lessee may modify the well closing program by submitting to the Minister, beforehand, a supplementary agreement certified by an engineer stating the nature of the modification as well as the reasons therefor.

"59.3. An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must, when closing a well, use, as long as there are risks of fluid inflow, a blowout prevention system including at least 3 different sealing mechanisms designed to resist to the various pressures projected in the detailed work program.

- **"59.4.** An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must, when closing a well, prepare and keep on the work site a daily report of the work.
- **"59.5.** The daily report mentioned in section 59.4 must contain all the information collected concerning the operations carried out when closing a well, in particular
- (1) the dates of the commencement and end of the closing work;
- (2) the name of the contractor carrying out the closing work;
- (3) a description of the activities carried out in chronological order and the time the closing crew spent on the activities:
- (4) a summary of the working condition of the blowout prevention equipment;
 - (5) the type of pump used and its capacity;
- (6) the type of cement used by specifying its density, the nature of its additives and the quantity used;
 - (7) mention of any trace of gas, oil or water in the well;
 - (8) results of pressure tests;
- (9) if applicable, the reasons for the loss of any casing or other equipment in the well together with a description of fishing operations;
- (10) the composition, concentration and detailed overview of all products stored and used on the site;
 - (11) the proposed work for the next 24 hours; and
- (12) if applicable, the burning activities and an estimate of the volume of burnt gas.

The electronic version of the documents must also be sent to the Minister.

- "59.6. An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must, every 48 hours, submit to the Minister a copy of each daily report completed until the closing work is stopped temporarily or permanently.
- "59.7. An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must, in the year following the end of the well closing work, send to the Minister a report signed by an engineer and containing

- (1) the name of the well and its number as it appears on the closing authorization;
 - (2) a summary of the activities related to the work;
- (3) a comparison of the results obtained following the closing in relation to those anticipated and the analysis made:
- (4) a description of the state of the well including an assessment of its integrity and a longitudinal section indicating the mechanical conditions of the well after the closing;
- (5) a copy of the interpreted logs and results of the analyses and studies related to them. The log data must be recorded according to the Log ASCII standard format of logging information commonly called the LAS format; and
- (6) the type of cement used for the cementation activities by specifying its density, the nature of its additives and the quantity used.

"59.8. Where a well is closed temporarily, an exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must inspect the well once a year and submit to the Minister, on 31 December of each year, a report indicating the state of the wellhead, of the fence or shelter protecting the well and of all the work performed for maintaining the closing conditions pertaining in particular to the integrity of the well and the general safety of the site. The report must contain photographs of the well and of the whole site."

34. Sections 60 and 61 are replaced by the following:

- **"60.** An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must, as soon as the work for temporary closing is completed, take the following measures:
- (1) if a well is onshore, indicate and protect the well-head using a fence or a shelter and secure the site;
- (2) if a well is in a water-covered area, install a device on the wellhead that enables it to be easily located.
- **"61.** An exploration licensee or production lessee for petroleum and natural gas, or for an underground reservoir must, as soon as the work for permanent closing is completed, indicate the well using a steel plate, 15 cm wide and 30 cm high, bearing, in relief printing, the name

of the well and its geographical coordinates. The plate must be installed 1.5 m from the ground using a steel rod. Where the rod is not welded to the outside casing, the plate must also indicate in which direction and at which distance the well is located."

35. Section 71 is amended

- (1) by inserting "includes the period of return of reflux water. It" after "extraction and" in the portion preceding subparagraph 1 of the first paragraph;
- (2) by adding the following after subparagraph 5 of the third paragraph:
- "(6) a mitigation plan showing that the proposed tests takes into account the harmonization of land use and minimizes disturbances for local communities and the environment;
- "(7) a schedule of the road traffic caused by the proposed work tests, including the volume of heavy trucking and the period in which it will take place and a map showing the planned routes;
- "(8) an assessment of the risks associated with the proposed tests and a plan for the management of those risks;
- "(9) an emergency measures plan indicating the prevention and intervention measures in case of an accident or fire;
- "(10) a communication plan for local communities covering the whole period of the work; and
- "(11) any other information deemed necessary by the Minister.":
 - (3) by adding the following paragraph at the end:

"The electronic version of the documents must also be sent to the Minister.".

36. Section 71.1 is amended by adding the following paragraph at the end:

"It also includes

- (1) the composition, concentration and detailed overview of all the products extracted, stored and used on the site;
 - (2) the proposed work for the next 24 hours; and
- (3) the burning activities and an estimate of the volume of burnt gas.".

- **37.** Section 73 is amended by inserting the following before subparagraph 1 of the first paragraph:
 - "(0.1) a summary of the activities related to the tests;".
- **38.** The following is inserted after section 118:

"CHAPTER VI.1 "REHABILITATION AND RESTORATION MEASURES

- "118.1. In this Chapter, "stratigraphical survey" means the operations for collecting data on a geological formation, using in particular samples and their analyses as well as technical surveys, carried out as part of the preliminary investigation work to eventually locate, design and develop a drilling site intended for the exploration for or production of petroleum, natural gas or brine, or the exploration for or operation of an underground reservoir and the well or wells that will be found there.
- "118.2. The exploration work referred to in subparagraph 1 of the first paragraph of section 232.1 of the Act are
 - (1) seismic reflection surveys on land;
 - (2) stratigraphical surveys;
 - (3) well drilling;
 - (4) well completion;
 - (5) well conversion;
 - (6) temporary or permanent closing of wells;
 - (7) well extraction tests;
 - (8) underground reservoir use tests; and
 - (9) storage of hydrocarbons.
- "118.3. The mining operations referred to in subparagraph 2 of the first paragraph of section 232.1 of the Act are
 - (1) seismic reflection surveys on land;
 - (2) stratigraphical surveys;
 - (3) well drilling;
 - (4) well completion;
 - (5) well conversion;

- (6) temporary or permanent closing of wells;
- (7) well production tests;
- (8) underground reservoir use tests;
- (9) hydrocarbon treatment;
- (10) storage of hydrocarbons; and
- (11) use of a pumping system.
- "118.4. Every person referred to in section 232.1 of the Act must provide a guarantee covering the anticipated cost of completing the work required under the rehabilitation and restoration plan.
- "118.5. The person referred to in subparagraph 1 of the first paragraph of section 232.1 of the Act must provide the Minister with the guarantee required under section 232.4 of the Act before commencement of the exploration work.

The person referred to in subparagraph 2 of the first paragraph of section 232.1 of the Act must provide the Minister with the guarantee determined under section 232.4 of the Act in accordance with the following rules:

- (1) the guarantee must be submitted in 3 payments;
- (2) the first payment must be made within 90 days following receipt of approval of the plan;
- (3) each subsequent payment must be made on the anniversary date of approval of the plan;
- (4) the first payment represents 50% of the total amount of the guarantee and the second and third payments, 25% each.
- "118.6. Despite sections 118.4 and 118.5, the persons referred to in those sections, who must provide more than one guarantee during a given year, may provide during that year a single guarantee covering the total amount of the guarantees, provided that the description of the guarantees included in the various rehabilitation and restoration plans is the same as regards the form of guarantees.

Payment of the guarantee covering the total amount of guarantees must be made on the first of the dates on which, during the given year, the guarantees had to be provided.

"118.7. The person referred to in section 232.1 of the Act must submit a guarantee to the Minister in one of the following forms or in a combination thereof:

- (1) a cheque made out to the Minister of Finance of Québec;
- (2) bonds issued or guaranteed by Québec or another province of Canada, by Canada or by a municipality in Canada and having a market value at least equal to the amount of the guarantee exigible. Registered bonds must be submitted with a power of attorney on behalf of the Minister of Finance and, where applicable, with a resolution authorizing the person who signs the power of attorney;
- (3) guaranteed investment certificates or term deposit certificates, in Canadian dollars, issued on behalf of the Minister of Finance by a bank, a savings and credit union or a trust company. Such certificates must have a term of at least 12 months, are automatically renewable until the issue of the certificate of release provided for in section 232.10 of the Act and must not include any restriction in respect of redemption during its term;
- (4) an irrevocable and unconditional letter of credit issued on behalf of the Gouvernement du Québec by a bank, a savings and credit union or a trust company;
- (5) ecurity or a guarantee policy issued on behalf of the Gouvernement du Québec by a legal person legally empowered to act in that quality;
- (6) a trust constituted in accordance with the provisions of the Civil Code and meeting the following requirements:
- (a) the purpose of the trust is to ensure completion of the work provided for in the rehabilitation and restoration plan under sections 232.1 to 232.10 of the Act;
- (b) the Minister of Finance and the person referred to in section 232.1 of the Act are joint beneficiaries of the trust;
- (c) the trustee is a bank, a savings and credit union or a trust company;
- (d) the trust patrimony is comprised only of sums in cash, or of bonds or certificates of the same type as those referred to in subparagraphs 2 and 3 of the first paragraph of this section.

The financial institutions referred to in subparagraphs 3, 4 and 6 of the first paragraph must be empowered by law to carry on the activities provided for in those subparagraphs.

- "118.8. In the case of a trust, interest yielded by the trust patrimony belongs to the trust. Interest kept as part of the trust patrimony are not to be used as payment of the guarantee.
- "118.9. The guarantees referred to in subparagraphs 1 to 3 of the first paragraph of section 118.7 are received on deposit by the Minister of Finance pursuant to the Deposit Act (chapter D-5).
- "118.10. Where a guarantee is provided under subparagraph 3 or 6 of the first paragraph of section 118.7, the contract that constitutes the guarantee must include the following conditions:
- (1) the purpose of the guarantee is to ensure completion of the work provided for in the rehabilitation and restoration plan under sections 232.1 to 232.10 of the Act;
- (2) no person may make withdrawals or be reimbursed without having obtained the certificate of release provided for in section 232.10 of the Act or a reduction in the guarantee under section 232.7 of the Act. That prohibition also applies to any form of compensation that may be made by the bank, the savings and credit union, the trust company or the trustee;
- (3) where section 232.8 of the Act applies, payment of the guarantee is exigible at the Minister's request;
- (4) the bank, the savings and credit union, the trust company or the trustee provides the Minister with the information it possesses concerning the contract;
- (5) in case of dispute, the courts of Québec are the sole competent courts;
 - (6) in the case of a trust:
 - (a) the trustee must be domiciled in Québec;
- (b) the trustee must see to the management of the trust at the expense of the settlor or of the person referred to in section 232.1 of the Act;
 - (c) the trust terminates when the Minister
- i. issues the certificate of release provided for in section 232.10 of the Act or the trust is replaced by another guarantee that complies with the requirements of this Regulation;
- ii. acts on the condition provided for in subparagraph 3 of the first paragraph of this section.

The person referred to in section 232.1 of the Act submits to the Minister a certified copy of the original contract.

- "118.11. The purpose of the irrevocable and unconditional letter of credit provided for in subparagraph 4 of the first paragraph of section 118.7, of the security or guarantee policy provided for in subparagraph 5 of the first paragraph of that section is to guarantee payment of the cost of the work where the requirements of sections 232.1 to 232.10 of the Act are not met. The contract must have a term of at least 12 months and must include clauses providing that
- (1) in the case of non-renewal, termination, revocation or cancellation, the guarantor notifies the Minister at least 60 days before the date fixed for the expiry, termination, revocation or cancellation of the guarantee;
- (2) in the case of non-renewal, termination, revocation or cancellation, the guarantor remains responsible, where the requirements of sections 232.1 to 232.10 of the Act are not met, for the payment of the cost of the work involved in mining operations carried out before the date of expiry, termination, non-renewal or revocation up to the amount covered by the letter of credit, the security or guarantee policy. That responsibility holds until the issue of a certificate of release provided for in section 232.10 of the Act, unless the person in question has deposited an alternative guarantee or the guarantor has deposited the amount covered by the letter of credit, the security or guarantee policy in a trust that complies with this Regulation where the Minister of Finance and the guarantor are joint beneficiaries;
- (3) where applicable, the obligation is solidary, with a waiver of the benefits of discussion and division;
- (4) the guarantor consents to the Minister's being able at any time after the sending of a notice of 60 days to make changes to the rehabilitation and restoration plan and waives pleading against the Minister any ground of defence pertaining to the content of the plan;
- (5) where section 232.8 of the Act applies, payment of the guarantee is exigible at the Minister's request;
- (6) in case of dispute, the courts of Québec are the sole competent courts.

The person referred to in section 232.1 of the Act must submit to the Minister a certified copy of the original contract.

- **"118.12.** The guarantee given may be replaced at any time by another guarantee that complies with the requirements of this Regulation.
- "118.13. For all forms of guarantees, the guarantee is exigible at the Minister's request in accordance with section 232.8 of the Act.
- "118.14. A guarantee is kept in force until the issue of a certificate of release provided for in section 232.10 of the Act.".
- **39.** Section 123 of the Regulation is amended by replacing "2, 15, 18, 58, 71, 71.1, 71.2, 74, 75, 81, 82, 84, 85, 86 and 112" by "4 to 7, 10 to 13, 18, 20 to 23.1, 29 to 32, 36 to 39, 41 to 43, 45, 47 to 48.1, 50 to 52.2, 52.4, 54.1, 57 to 57.6, 58, 59.1 to 59.8, 60, 61, 66, 71 to 71.2, 77, 83, 88, 89, 91 to 95, 102 to 104 and 115 to 118".
- **40.** Schedule IV is struck off.
- **41.** This Regulation comes into force on the date of its publication in the *Gazette officielle du Québec*.

102683

Draft Regulation

Professional Code (chapter C-26)

Chartered administrators

- —Diplomas giving access to permits
- —Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Regulation to amend the Regulation respecting the diplomas issued by designated educational institutions which give access to permits or specialist's certificates of professional orders, appearing below, may be made by the Government on the expiry of 45 days following this publication.

The draft Regulation amends section 1.27 of the Regulation respecting the diplomas issued by designated educational institutions which give access to permits or specialist's certificates of professional orders (chapter C-26, r. 2), which lists the diplomas giving access to the permit issued by the Ordre des administrateurs agréés du Québec and the educational institutions awarding the diplomas, in particular to add ten diplomas.

The draft Regulation has no impact on enterprises, including small and medium-sized businesses.