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S.I. 2013 No.

Offshore Petroleum Act

Act 2007-30

OFFSHORE PETROLEUM REGULATIONS, 2013

The Minister, in exercise of the power conferred on him by section 57 of the *Offshore Petroleum Act*, makes the following Regulations:

PART I

Preliminary

Citation

1. These Regulations may be cited as the *Offshore Petroleum Regulations, 2013*.

Interpretation

2. In these Regulations,
“annual environmental report” means the report referred to in regulation 44;
“annual health and safety report” means the report referred to in regulation 55;
“annual production report” means the report referred to in regulation 34;
“artificial lift” means a method of assisting the natural energy of a reservoir to lift oil or water to the surface through a well path, using artificial mechanical devices or extraneous energy or both;
“blow out” means an uncontrolled discharge of gas, oil or water from a well;

“blow out prevention equipment” means

- (a) a device that may be attached to a casing head to enable a well to be sealed in order to confine the well fluids in the well path; and
- (b) a diverter system;

“confined space” means a space of an enclosed nature in which there is a risk of death or serious injury as a result of the presence of hazardous substances or dangerous conditions;

“electrical system” includes

- (a) a source of electricity, whether mains or a local or temporary power generator;
- (b) any equipment powered by the electricity; and
- (c) the means by which the source and the equipment are connected including overhead and underground power cables, where applicable;

“environmental audit” means a systematic, periodic and documented evaluation of the environmental organisation, performance and system of a licensee, against standards determined by a certified, independent environmental auditor on the basis of the environmental and health and safety management systems of the licensee, best industry practice and any relevant law;

“exploration survey” means a survey to determine whether petroleum exists in the surface and subsurface of the earth and includes a geophysical, geological and geochemical survey;

“explosive atmosphere” means an atmosphere in which there is a combustible mixture of air and one or more hazardous substances in the form of gases, vapours, mists or dusts;

“health and safety audit” means a systematic, periodic and documented evaluation of the health and safety organisation, performance and system of a licensee, against standards determined by a certified, independent health and safety auditor on the basis of the health and safety and environmental

management systems of the licensee, best industry practice and any relevant law;

“health and safety plan” means a plan that specifies the safety measures and procedures to be taken to ensure the safe and efficient conduct of petroleum operations;

“income year” has the meaning assigned to it by section 85 of the *Income Tax Act*, Cap. 73;

“joint operating agreement” means an agreement between persons who jointly apply for or hold a licence, that governs the relationship between those persons in respect of the rights and liabilities under the licence;

“permit to work system” means a formal, written system for the control of certain types of work that are potentially hazardous through the issue of permits that specify the work to be performed and the safety procedures to be followed;

“produced water” means water produced from a hydrocarbon bearing formation during the extraction of petroleum and includes formation water, water injected into the formation and chemicals added downhole or during the process of separating oil and water;

“production test” means a test to determine a well production rate;

“risk assessment” means an assessment that identifies

- (a) the risks or threats to health, safety and the environment as a result of the petroleum operations of a licensee; and
- (b) the measures necessary to protect health, safety and the environment from potential harm;

“safety case” means a detailed document that demonstrates that in respect of any petroleum operations to be conducted

- (a) foreseeable safety risks have been identified and assessed in safety and engineering studies; and

- (b) essential controls and mitigation measures have been implemented to control the risks, in order to ensure the safety of personnel, members of the public, the petroleum facility and the petroleum operations;

“signature bonus” has the meaning assigned to it by section 3 of the *Offshore Petroleum (Taxation) Act, 2007* (Act 2007-31;)

“significant spill” means an unauthorised discharge of oil, chemical or hazardous substance exceeding 0.5 barrel that is in, or likely to enter, the sea, surface or groundwater or an unauthorised discharge of oil, chemical or hazardous substance onto land exceeding 10 barrels of oil per incident or 0.5 barrel of chemical or hazardous substance per incident;

“well bore” means the route of a well from the termination point to the well head.

General requirements for applications and notifications

3.(1) A person who makes an application or issues a notification to the Designated Authority pursuant to the Act or these Regulations

- (a) shall
 - (i) submit the application or notification in a form acceptable to the Designated Authority;
 - (ii) include, in the application or notification, the full name, address, including electronic mailing address, and telephone and facsimile numbers of the person;
 - (iii) submit in respect of the application or notification such other information as may be required by any guidelines or standards established, published, issued or adopted by the Designated Authority;
 - (iv) sign the application or notification;
 - (v) provide any information required by the Designated Authority in a timely manner; and

- (vi) in respect of a notification, submit details of the licence held by the person including the number and type of licence; and
 - (b) may, in respect of an application, include such other information as may be necessary or useful to the Designated Authority to determine the application.
- (2) Where the Designated Authority determines an application made by a person pursuant to the Act or these Regulations, the Designated Authority shall provide the person with written notification of the determination.

Qualification as an operator or a participant

4.(1) An applicant for qualification as an operator shall submit the following information to the Designated Authority:

- (a) proof of the legal capacity of the applicant to contract, including documentation in respect of
 - (i) incorporation as a company;
 - (ii) organisation as a society with restricted liability; or
 - (iii) formation as any other type of business entity;
- (b) details of the structure of the applicant as a business entity;
- (c) particulars of all holdings of not less than 5 per cent in number or value of any class of capital issued by the applicant;
- (d) evidence of the financial resources available to the applicant for petroleum operations and, where the resources are borrowed or attracted, evidence of the source of the resources;
- (e) any plans or commitments of the applicant in respect of petroleum operations for the following 5 years;
- (f) the annual financial reports of the applicant for the previous 3 years;

- (g) details of previous roles, responsibilities, activities and achievements of the applicant in respect of
 - (i) offshore exploration or production activities in Barbados or elsewhere; and
 - (ii) frontier exploration and deep water prospects;
 - (h) details of the environmental management system of the applicant;
 - (i) the environmental policy of the applicant;
 - (j) details of the environmental record of the applicant for the previous 5 years;
 - (k) details of the health and safety management system of the applicant;
 - (l) the health and safety policy of the applicant;
 - (m) details of the health and safety record of the applicant for the previous 5 years; and
 - (n) evidence of the past performance of the applicant in respect of
 - (i) the procurement of local goods and services for use in respect of petroleum operations;
 - (ii) the employment of local persons; and
 - (iii) the transfer of technology and skills to and the training of, local persons.
- (2) An applicant for qualification as a participant shall submit to the Designated Authority the information specified in paragraph (1)(a) to (f).
- (3) The Designated Authority shall determine an application for qualification as an operator or a participant within 45 days of receipt of the application.

Submission of joint operating agreement

5. A person who enters into a joint operating agreement shall, as soon as practicable after the execution of the agreement, submit a copy of the agreement to the Designated Authority.

PART II

Reconnaissance Licences

Application for reconnaissance licence

6.(1) An applicant for a reconnaissance licence shall submit the following information to the Designated Authority:

- (a) the area to which the application relates, delimited according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84;
- (b) the period for which the licence is required;
- (c) a detailed description of the reconnaissance activities to be conducted in the area;
- (d) the motivation for and purpose of the activities;
- (e) evidence of the financial resources and technical capability available to the applicant for the conduct of the activities;
- (f) an environmental impact assessment in respect of the activities;
- (g) the environmental policy of the applicant;
- (h) details of the environmental management system of the applicant;
- (i) the health and safety policy of the applicant;
- (j) details of the health and safety management system of the applicant;
and

- (k) a detailed description of any proposed marketing plan or conditions of sale in respect of information or results that may be obtained as a result of the activities.

(2) The Designated Authority shall determine an application for a reconnaissance licence within 60 days of receipt of the application.

Application for extension of reconnaissance licence

7.(1) A licensee who applies for an extension of a reconnaissance licence shall submit the following information to the Designated Authority:

- (a) the reason for the extension;
- (b) the period for which the extension is required; and
- (c) where additional reconnaissance activities are to be conducted,
 - (i) a detailed description of the activities; and
 - (ii) an environmental impact assessment in respect of the activities.

(2) The licensee shall submit the application not more than 60 but at least 45 days prior to the expiry of the licence.

(3) The Designated Authority shall determine an application for an extension of a reconnaissance licence within 45 days of receipt of the application.

PART III

Exploration Licences and Work Programmes

Application for exploration licence

8.(1) An applicant for an exploration licence shall submit the following information to the Designated Authority:

- (a) the block to which the application relates;
- (b) the name of the person to be the operator under the licence;

- (c) where applicable, the offer of the applicant in respect of:
 - (i) the work programme to be undertaken by the applicant and the phases thereof;
 - (ii) crown participation in respect of the petroleum operations to be conducted in the block;
 - (iii) a minimum annual training expenditure;
 - (iv) a minimum annual coastal and marine environment research fee; and
 - (v) a signature bonus; and
 - (d) a health and safety plan in respect of the petroleum operations to be conducted in the block.
- (2) The Designated Authority shall determine an application for an exploration licence submitted pursuant to
- (a) a call for tenders in accordance with the schedule specified in the call; and
 - (b) direct negotiations within 60 days of receipt of the application.

Application for approval to amend work programme

9.(1) A licensee who applies for approval to amend a work programme shall submit the following information to the Designated Authority:

- (a) details of the amendment required;
- (b) the reason for the amendment; and
- (c) where relevant, any technical and other evidence necessary for the Designated Authority to determine whether there is sufficient evidence to conclude that the continuation of drilling activities in the licence area would not result in a discovery.

(2) The Designated Authority shall determine an application for approval to amend a work programme within 30 days of receipt of the application.

Application for extension of exploration licence

10.(1) A licensee who applies for an extension of an exploration licence shall submit the following information to the Designated Authority:

- (a) the area to which the application relates, delimited according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84;
- (b) the reason for the extension; and
- (c) the period for which the extension is required.

(2) The Designated Authority shall determine an application for an extension of an exploration licence within 45 days of receipt of the application.

Relinquishment

11.(1) A licensee shall ensure that

- (a) an area to be relinquished is delimited according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84; and
- (b) the licence area remaining after a relinquishment
 - (i) has boundaries which
 - (A) run north-south along the North axis (Northing) and east-west along the East axis (Easting); and
 - (B) extend for 100 metres or a whole integer multiple of 100 metres; and
 - (ii) is separated into no more than three parts.

(2) Notwithstanding paragraph (1), a licensee may apply to the Designated Authority for approval to relinquish an area in a manner that is not consistent with that paragraph.

(3) The Designated Authority shall determine an application made pursuant to paragraph (2) within 30 days of receipt of the application.

PART IV

Discovery, Appraisal and Production Licences

Particulars of discovery

12. A licensee who makes a discovery shall include in the written particulars to be submitted to the Designated Authority pursuant to section 20(1) (b) and (2) of the Act

- (a) the location of the discovery including the surface location, bottom hole location and proposed total well depth; and
- (b) any information, including any evidence and technical data, necessary to appraise the discovery.

Appraisal plan

13.(1) A licensee who applies to the Designated Authority for approval of an appraisal plan shall include in the plan:

- (a) a programme and description of the appraisal activities to be conducted;
- (b) a schedule for the conduct of the activities; and
- (c) an estimation of the costs to be incurred in the conduct of the activities.

(2) The Designated Authority shall determine an application for approval of an appraisal plan within 60 days of receipt of the application.

(3) Where a licensee applies for approval to amend an appraisal plan previously approved by the Designated Authority, the Designated Authority shall determine the application within 30 days of its receipt.

(4) Where the Designated Authority does not approve an appraisal plan or an amendment to an appraisal plan previously approved by the Designated Authority, the Designated Authority shall notify the licensee of

- (a) the reason for the decision; and
- (b) the measures that the licensee is required to take for the plan or amendment to be approved.

(5) A licensee who receives notification pursuant to paragraph (4) shall, within 30 days of receipt of the notification, revise the plan or amendment in accordance with the measures specified by the Designated Authority and resubmit the plan or amendment for approval.

(6) The Designated Authority shall determine an application for approval of an appraisal plan or an amendment revised pursuant to paragraph (5) within 30 days of receipt of the plan or amendment.

Declaration of commercial discovery

14.(1) A licensee who states, pursuant to section 20(2) or 21(6) of the Act, that a discovery is a commercial discovery or constitutes a commercial discovery in conjunction with another discovery in the licence area shall submit to the Designated Authority any information, including any evidence and technical data, necessary to appraise the discovery.

- (2) The licensee shall, pursuant to paragraph (1), submit in particular
- (a) the delineation, thickness and lateral extent of the discovery;
 - (b) an estimation of the volume of the discovery;
 - (c) any test results from appraisal activities conducted in respect of the discovery; and

- (d) a preliminary economic study for the development of the discovery.

Application for production licence

15.(1) An applicant for a production licence shall submit the following information to the Designated Authority:

- (a) the area to which the application relates, delimited
 - (i) according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84; and
 - (ii) by depth;
- (b) the period for which the licence is required;
- (c) the name of the person to be the operator under the licence;
- (d) where applicable, the offer of the applicant in respect of:
 - (i) state participation in respect of the petroleum operations to be conducted in the area;
 - (ii) a minimum annual training expenditure; and
 - (iii) a minimum annual coastal and marine environment research fee;
- (e) in respect of the petroleum operations to be conducted in the area
 - (i) an environmental impact assessment;
 - (ii) an environmental plan; and
 - (iii) a health and safety plan.

(2) Notwithstanding paragraph (1)(e)(i) and (ii), an applicant for a production licence who submits the application pursuant to a call for tenders or direct negotiations shall not be required to submit an environmental impact assessment and environmental plan in respect of the petroleum operations to be conducted in the area to which the application relates unless the applicant receives from the Designated Authority, pursuant to section 24(2A) of the Act, written notice regarding the suitability of the applicant to carry out production activities.

- (3) The Designated Authority shall determine an application for a production licence within 60 days of receipt of the application.
- (4) Notwithstanding paragraph (3), the Designated Authority shall determine an application submitted pursuant to a call for tenders in accordance with the schedule specified in the call.

Preliminary plan for development and production and development plan

16.(1) A licensee who applies to the Designated Authority for approval of a preliminary plan for development and production in respect of the discovery to which the licence relates shall include in the plan:

- (a) a preliminary estimation or description, as the case may be, in respect of each matter specified in paragraph (2); and
- (b) the period required for the completion and submission of a development plan.

(2) A licensee who applies for approval of a development plan shall include in the plan:

- (a) the design and layout of the petroleum facilities;
- (b) provision for the maintenance of the petroleum facilities;
- (c) the security measures to be taken for the protection of the petroleum facilities;
- (d) a technical description of the methods to be used in production activities, including the geological and reservoir engineering aspects of the methods;
- (e) a schedule for the development of the field;
- (f) the date on which it is intended to initiate production;
- (g) an estimation of the volume of petroleum to be produced;
- (h) the facilities for the storage and transportation of the petroleum; and

- (i) an estimation of the costs to be incurred in the conduct of production activities.
- (3) The Designated Authority shall determine an application for approval of
 - (a) a preliminary plan for development and production, within 45 days; and
 - (b) a development plan, within 120 days of receipt of the application.
- (4) Where the Designated Authority does not approve a preliminary plan for development and production, the licensee shall not be required to revise the plan but the Designated Authority shall notify the licensee of
 - (a) the reason for the decision; and
 - (b) the measures that the licensee is required to take in respect of the preparation of the development plan to be submitted for the approval of the Designated Authority.
- (5) Where a licensee applies for approval to amend a development plan previously approved by the Designated Authority, the Designated Authority shall determine the application within 60 days of its receipt.
- (6) Where the Designated Authority does not approve a development plan or an amendment to a development plan previously approved by the Designated Authority, the Designated Authority shall notify the licensee of
 - (a) the reason for the decision; and
 - (b) the measures that the licensee is required to take for the plan or amendment to be approved.
- (7) A licensee who receives notification pursuant to paragraph (6) shall, within 60 days of receipt of the notification, revise the plan or amendment in accordance with the measures specified by the Designated Authority and resubmit the plan or amendment for approval.

(8) The Designated Authority shall determine an application for approval of a development plan or an amendment revised pursuant to paragraph (7) within 60 days of receipt of the plan or amendment.

Decommissioning plan

17.(1) A licensee who applies to the Designated Authority for approval of a decommissioning plan shall include in the plan:

- (a) details of the petroleum facility to be decommissioned, including the location and type of material;
- (b) a list of the options which exist for decommissioning the facility including a shortlist of the options that the licensee prefers and the reasons of the licensee for the rejection of the options not shortlisted;
- (c) the option selected by the licensee for decommissioning;
- (d) an estimation of the cost of the option selected by the licensee for decommissioning;
- (e) the date on which the licensee intends permanently to cease petroleum operations;
- (f) the time frame within which the licensee intends to conduct decommissioning operations;
- (g) the arrangements of the licensee for the management of the project of implementing the decommissioning plan; and
- (h) the measures, if any, that the licensee intends to take to secure the licence area against potential pollution from abandoned wells and deposits of cuttings.

(2) The Designated Authority shall determine an application for approval of a decommissioning plan within 120 days of receipt of the application.

- (3) Where a licensee applies for approval to amend a decommissioning plan previously approved by the Designated Authority, the Designated Authority shall determine the application within 60 days of its receipt.
- (4) Where the Designated Authority does not approve a decommissioning plan or an amendment to a decommissioning plan previously approved by the Designated Authority, the Designated Authority shall notify the licensee of
 - (a) the reason for the decision; and
 - (b) the measures that the licensee is required to take for the plan or amendment to be approved.
- (5) A licensee who receives notification pursuant to paragraph (4) shall, within 60 days of receipt of the notification, revise the plan or amendment in accordance with the measures specified by the Designated Authority and resubmit the plan or amendment for approval.
- (6) The Designated Authority shall determine an application for approval of a decommissioning plan or an amendment revised pursuant to paragraph (5) within 60 days of receipt of the plan or amendment.

Decommissioning Fund

- 18.(1)** The Designated Authority and the licensee shall assess annually the level of contribution to be made to the Decommissioning Fund of the licensee in accordance with the decommissioning plan.
- (2) The following shall be taken into account in determining the annual contribution of the licensee to the Decommissioning Fund:
 - (a) the annual gross production of the licensee in respect of the income year;
 - (b) an estimation of the value of the total amount of recoverable petroleum reserves in the fields within the licence area;
 - (c) an estimation of the current cost of the option selected by the licensee for decommissioning;

- (d) an estimation of the residual value of the equipment to be decommissioned;
- (e) the size of the contributions already accumulated in the fund; and
- (f) the total interest expected to accrue on the fund.

Application for extension of production licence

19.(1) A licensee who applies for an extension of a production licence shall submit the following information to the Designated Authority:

- (a) the reason for the extension;
- (b) the period for which the extension is required; and
- (c) information which demonstrates that the licensee has fully complied with the Act, these Regulations and the development plan of the licensee.

(2) The Designated Authority shall determine an application for an extension of a production licence within 45 days of receipt of the application.

PART V

Operational Matters

Notification of exploration survey

20.(1) A licensee shall, at least 30 days prior to the date on which the licensee intends to conduct an exploration survey, notify the Designated Authority of the intention to conduct the survey.

- (2) The licensee shall include in the notification, where applicable:
- (a) a detailed description of the type of survey to be conducted;
 - (b) the duration of the survey; and
 - (c) a map which delimits the area to be surveyed.

Annual exploration report

21.(1) A licensee who holds an exploration licence shall, within 45 days after the end of an income year, submit to the Designated Authority, an exploration report which contains a description and evaluation of the exploration activities

- (a) conducted in the income year; and
- (b) planned for the following income year.

(2) The licensee shall prepare the report with reference to the work programme specified in the licence.

Notification and commencement of drilling activity

22.(1) A licensee shall, at least 60 days prior to the date on which the licensee intends to conduct a drilling activity, notify the Designated Authority of the intention to conduct the activity.

(2) The licensee shall include in the notification, where applicable:

- (a) the coordinates of the licence area;
- (b) the coordinates of the area in which the drilling activity is to be conducted;
- (c) a description of the drilling activity to be conducted, including the type of well to be drilled;
- (d) the depth of water at the proposed location of the drilling activity;
- (e) the bottom hole depth and location;
- (f) the purpose and geological objectives in drilling the well;
- (g) the rig name, rig type and rig operator to be used in the drilling activity;
- (h) the proposed dates of well spud and of completion of the well;
- (i) the proposed total measured depth and total vertical depth of the well;

- (j) interpreted and, where appropriate, migrated seismic lines intersecting at or near the location of the well;
 - (k) details of any proposed directional drilling or intentionally deviated well;
 - (l) a schematic diagram of the proposed casing programme;
 - (m) details of the proposed sampling programme, including the intervals for drill cuttings and cores, the types and intervals of electric logs and surveys and the intervals and methods of formation and reservoir testing;
 - (n) details of potential hazards such as shallow gas, hydrogen sulphide, high pressures or temperatures and borehole instability; and
 - (o) proposed mitigation and contingency plans in respect of potential hazards.
- (3) The licensee shall not
- (a) commence drilling activities prior to submission of the notification referred to in paragraph (1); and
 - (b) conduct drilling activity in an area outside the approved licence area, without the consent of the Designated Authority.

Operator to ensure safe drilling activity

- 23.** An operator shall take measures to
- (a) ensure the safe and efficient conduct of drilling activity; and
 - (b) prevent explosions, blowouts, pollution and other incidents during drilling activity which may cause damage or injury.

Name and number of well

- 24.** A licensee shall, unless a well is abandoned,
- (a) assign, in accordance with the guidelines of the Designated Authority, a distinguishing name and number to each well; and
 - (b) clearly mark the well in a permanent manner with the name and number.

Daily drilling report

25.(1) A licensee who conducts drilling or workover activity shall submit to the Designated Authority a daily drilling report in respect of the drilling or workover activity by 10.00 a.m on the day following the end of the period of 24 hours to which the report relates.

- (2) The licensee shall include in the report:
- (a) the name and number of the well;
 - (b) the name and identification number of the rig;
 - (c) the names of the site supervisor and rig supervisor;
 - (d) the time and date of well spud and estimated rig release;
 - (e) the number of days which have passed since the date of well spud;
 - (f) the depth of the well, in metres, at the end of the period to which the report relates; and
 - (g) information on operations conducted during the period to which the report relates including:
 - (i) bit and hydraulics data;
 - (ii) drill string data;
 - (iii) drilling fluid data;
 - (iv) well data;

- (v) daily drilling fluid;
- (vi) a description of the formations encountered during the period to which the report relates including the depth at which the formations were encountered;
- (vii) matters related to safety and blow out prevention equipment; and
- (viii) details of any unscheduled events which occurred during the period to which the report relates.

Testing of well and well test analysis report

26.(1) A licensee who tests a well to determine reservoir pressure and reservoir characteristics within the vicinity of the well bore shall, within 90 days of completion of the test, submit to the Designated Authority a well test analysis report in respect of the test.

- (2) The licensee shall include in the report:
 - (a) the name and number of the well;
 - (b) the type of test and the date on which it was conducted;
 - (c) the reservoir interval tested;
 - (d) any raw data obtained as a result of the test;
 - (e) the quantity of petroleum produced;
 - (f) the results of the test including all interpreted results; and
 - (g) a description of the analysis or interpretation undertaken.

Sampling and sample analysis report

27.(1) A licensee shall take samples from a well and ensure that the number of samples taken are representative of the characteristics of the well sampled.

- (2) The licensee shall ensure that the samples are clearly marked and stored.

- (3) The licensee shall retain, for inspection by the Designated Authority
- (a) the following samples from an individual well or well path, where the samples have been taken:
 - (i) cuttings from appraisal wells, exploration wells and development wells;
 - (ii) where applicable, a complete longitudinal section of conventional cores with colour photographs; and
 - (iii) fluids, including oil, condensate or formation fluid, from each interval or set of intervals tested during formation testing and formation test logging; and
 - (b) the results from any laboratory analysis conducted, including routine and special petrophysical cores analysis and pressure, specific volume and temperature properties of fluid samples.
- (4) The licensee shall, within 180 days after rig release, submit to the Designated Authority a sample analysis report in respect of the analysis of the samples collected.

Well completion report

28.(1) A licensee shall, within 180 days after rig release, submit to the Designated Authority a well completion report.

- (2) The licensee shall include in the report:
- (a) a summary, at the beginning of the report, of basic information in respect of the well to which the report relates including the name and number of the well;
 - (b) details of the rig and the drilling contractor, where applicable;
 - (c) a map of the precise location of the well site;
 - (d) the dates of well spud and rig release;
 - (e) the total depth drilled, in metres;

- (f) basic well data;
- (g) lithologies and formation information;
- (h) a composite log;
- (i) core and side wall sample descriptions;
- (j) petrographic descriptions;
- (k) palaeontological information;
- (l) log interpretations;
- (m) details of holes, casings and cementing;
- (n) results of interference and pressure testing;
- (o) information on well completion or abandonment;
- (p) a velocity survey; and
- (q) flow test results.

Flaring or venting and use of natural gas

29.(1) A licensee shall not flare or vent natural gas recovered from the licence area without the written permission of the Designated Authority.

(2) Notwithstanding paragraph (1), a licensee may flare or vent natural gas without the written permission of the Designated Authority where the flaring or venting is conducted

- (a) in an emergency; or
- (b) in connection with an initial well testing operation and does not exceed 72 hours.

(3) A licensee who flares or vents natural gas with the written permission of the Designated Authority shall, at intervals specified by the Designated Authority, inform the Designated Authority of the measures that the licensee has

taken to reduce or discontinue the flaring or venting within a reasonable period.

(4) A licensee who flares or vents natural gas pursuant to paragraph (2) shall, as soon as practicable, inform the Designated Authority of the flaring or venting and the reason for the flaring or venting.

(5) A licensee shall, as far as practicable, use natural gas recovered from the licence area in the conduct of petroleum operations including:

- (a) the generation of power;
- (b) the fuelling of production facilities;
- (c) reinjection to maintain reservoir pressure; and
- (d) recycling for improved recovery of petroleum.

Measurement of petroleum

30.(1) A licensee shall measure or weigh, by a method customarily used in best industry practice, all petroleum recovered from the licence area.

- (2) The licensee shall, in determining which method to employ, consider
- (a) whether separation and dedicated processing of the petroleum prior to its measurement and exportation are likely to occur; and
 - (b) the likely characteristics of the petroleum throughout production.

Monthly production report

31.(1) A licensee shall, within 28 days after the end of each month, submit to the Designated Authority, a production report in respect of each well that has not been plugged or abandoned.

- (2) The licensee shall include in the report:
- (a) the name and number of the well; and

- (b) in respect of the month to which the report relates
 - (i) the number of days or hours during which the well was on-stream;
 - (ii) the number of days or hours during which injection occurred;
 - (iii) the quantity of petroleum produced or injected, including daily rates;
 - (iv) the American Petroleum Institute gravity and sulphur content for any petroleum produced;
 - (v) the quantity of produced water generated or utilised, including daily rates;
 - (vi) the calculated gas and water injection rates, including daily rates;
 - (vii) details of any production, utilisation and flaring or venting of gas; and
 - (viii) details of all wells producing by artificial lift including specifications of the pumps used, depths and operational performance.

Annual production tests and pressure surveys

- 32.(1)** A licensee shall, no more than 60 days prior to the end of an income year, conduct production tests on each producing well.
- (2) The licensee shall ensure that the annual production tests
 - (a) determine the volume of oil, gas and water in the well;
 - (b) obtain data on the deliverability or productivity of the well;
 - (c) determine the characteristics of the reservoir; and
 - (d) obtain representative samples of the fluids present in the well.
 - (3) A licensee shall, no more than 60 days prior to the end of an income year, conduct pressure surveys on each field or part thereof in the licence area.

(4) The licensee shall include the results of the annual production test and pressure survey in the annual production report to be submitted pursuant to regulation 34.

Annual reserves report

33.(1) A licensee shall, at the end of an income year, prepare an annual reserves report in respect of the estimates of recoverable petroleum reserves of each reservoir or portion thereof.

(2) The licensee shall

- (a) base the report on deterministic or probabilistic calculations or both;
and
- (b) include in the report an evaluation of the petroleum reserves, as classified and defined in accordance with best industry practice, for each reservoir or portion thereof, including:
 - (i) an estimation of the initial volume of oil and gas in the reservoir;
and
 - (ii) an estimation of the petroleum recovery factors.

(3) The licensee shall include the annual reserves report in the annual production report to be submitted pursuant to regulation 34.

Annual production report

34.(1) A licensee shall, within 120 days after the end of an income year, submit to the Designated Authority an annual production report in respect of each licence area.

(2) The licensee shall include in the report:

- (a) cumulative oil, condensate, gas and water production;
- (b) cumulative oil, gas and water injection;

- (c) watercut, gas to oil ratio and condensate to gas ratio for each petroleum well and reservoir;
- (d) flowing tube head and flowing down hole pressures for each well, where measured;
- (e) fuel, gas or oil used, gas or oil flared and water discharged;
- (f) the American Institute of Petroleum gravity of oil and condensate and gas gravity, where measured, and water quality;
- (g) static tube head and static down hole pressures for each petroleum well and water well, where measured;
- (h) completion and perforation intervals and details of changes made to those intervals during the year;
- (i) any suspensions or downtime for each petroleum and water well and the reasons for the suspensions or downtime;
- (j) the results of the annual production tests and pressure surveys conducted pursuant to regulation 32;
- (k) a summary of production activities conducted in the field or as studies, and the results of those activities or studies, including:
 - (i) any significant revised views on geology and geophysics, including seismic and geological interpretations or modelling, structure and stratigraphy;
 - (ii) petrophysical interpretation;
 - (iii) reservoir fluid parameters; and
 - (iv) reservoir performance, reservoir model, production and injection profiles;
- (l) the annual reserves report referred to in regulation 33;
- (m) the size of petroleum stocks held on the first day, and the size of petroleum stocks held on the last day, of the income year;

- (n) a status report on
 - (i) new production facilities commissioned or under design or construction; and
 - (ii) details of any significant works undertaken on existing production facilities, during the year;
 - (o) details of any other major technical studies conducted during the year; and
 - (p) an outline of the operations to be conducted in the following year, including:
 - (i) quarterly and annual production forecasts;
 - (ii) a description of proposed significant and material modifications to production facilities; and
 - (iii) proposed specialist studies.
- (3) The licensee shall submit with the annual production report, amendments to the development plan applicable to the activities to be conducted in the following year.

Plugging notification

- 35.(1)** A licensee shall, at least 30 days prior to the date on which the licensee intends to plug an abandoned well, notify the Designated Authority of the intention to plug the well.
- (2) The licensee shall include in the notification, where applicable:
- (a) the reason for the abandonment of the well;
 - (b) specifications as to the manner in which the well will be plugged and the plugs will be checked;
 - (c) a description of the condition of the well site after abandonment and the procedures for verification of the condition; and

- (d) a copy of formation evaluation logs and other relevant documentation.

PART VI

Environmental Obligations

Environmental management system

36.(1) A licensee shall ensure that the environmental management system of the licensee facilitates planning, implementation, operation, review, corrective action and continuous improvement in respect of processes which address matters relevant to the environment including, where applicable:

- (a) waste management, including the production, transportation storage, treatment and disposal of waste and the keeping of records, in respect of
 - (i) cuttings, drilling fluid and other waste generated by petroleum operations;
 - (ii) hazardous waste;
 - (iii) radioactive materials and waste; and
 - (iv) explosives;
- (b) the disposal of
 - (i) oil, gas and liquids; and
 - (ii) produced water;
- (c) chemical management including the transportation and storage of chemicals and the keeping of records;
- (d) contingency management including:
 - (i) responses to oil and chemical spills;
 - (ii) the management of oil, chemical and fire residue;

- (iii) the clean-up of contaminated land; and
 - (iv) the abandonment of wells and decommissioning;
 - (e) containment and drainage management;
 - (f) controls on
 - (i) air emissions; and
 - (ii) discharges to water or land or injected underground;
 - (g) monitoring, including the monitoring of
 - (i) emissions, equipment, operations and the keeping of records in respect of discharges to air, water including groundwater, and land; and
 - (ii) natural and physical resources in order to measure the potential or actual impact of petroleum facilities and operations on the resources; and
 - (h) any practice required by government entities to address particular circumstances regarding the protection of the environment.
- (2) The licensee shall review the environmental management system at least every 5 years to take account of any changes in activities, practices or organisation relevant to the environmental management system.

Environmental policy

37.(1) A licensee shall prepare a written statement of the environmental policy of the licensee and the organisational arrangements for the implementation of the policy.

(2) The licensee may include the statement of environmental policy in a combined statement of policy in respect of the environment and health and safety or any other matter.

- (3) The licensee shall
- (a) review the policy at least every 5 years to take account of any changes in activities, practices or organisation relevant to the policy; and
 - (b) make the policy available to personnel in any language necessary for effective communication.

Environmental plan

38.(1) A licensee who holds an exploration or a production licence shall have an environmental plan approved by the Minister responsible for the Environment and ensure that the plan is based on the environmental management system of the licensee.

- (2) The licensee shall include in the plan in respect of
- (a) the environment, training and emergency response
 - (i) the environmental measures to be taken and procedures to be used by the licensee during the conduct of petroleum operations;
 - (ii) the training programmes, frequency of training and environmental manuals to be provided to personnel by the licensee or third party subcontractors during the conduct of petroleum operations;
 - (iii) the accident response facilities to be used and the supervisory staff to be responsible for investigations to be performed by the licensee in the event of a major environmental incident during the conduct of petroleum operations; and
 - (iv) a list of the names, positions or job descriptions, addresses including electronic mail addresses and telephone and facsimile numbers, where applicable, of the persons responsible for environmental matters training and emergency response;

- (b) hazardous substances, a description of the emergency response measures to be taken by the licensee in the event of
 - (i) a spill or escape of hazardous substances; or
 - (ii) a fire, explosion or other circumstance which involves hazardous substances,

during the conduct of petroleum operations; and

- (c) the workplace, a general description of
 - (i) the response equipment; and
 - (ii) the documents,

to be kept at the petroleum facility.

- (3) The licensee shall review the plan at least every 5 years to take account of any changes in activities, practices or organisation relevant to the plan.

Environmental impact assessment

39.(1) A person who prepares, for submission to the Designated Authority, an environmental impact assessment in respect of petroleum operations to be conducted in an area shall include in the assessment:

- (a) a description of the petroleum operations including the site or location, design and size or scale of the operations;
- (b) the data necessary to identify and assess the main effects that the petroleum operations are likely to have on the environment;
- (c) a description of the forecasting methods used to assess the effects;
- (d) a description of the significant, direct and indirect effects the petroleum operations are likely to have on the environment, explained by reference to the potential impact on such of the following as, in the circumstances of the case, are relevant:
 - (i) human beings;

- (ii) marine and terrestrial flora and fauna;
 - (iii) the seabed and subsoil;
 - (iv) the soil;
 - (v) salt and fresh water;
 - (vi) the atmosphere and the quality of the air;
 - (vii) the climate;
 - (viii) the seascape;
 - (ix) the landscape;
 - (x) material assets;
 - (xi) cultural heritage; and
 - (xii) the inter-relationship between any of the factors set out in subparagraphs (i) to (xi);
- (e) where significant effects are identified, a description of the measures to be taken in order to avoid, mitigate or remedy the effects;
- (f) the estimated type and quantity of any residues and emissions likely to result from the petroleum operations including:
- (i) pollutants of water, air or soil;
 - (ii) greenhouse gases;
 - (iii) noise;
 - (iv) vibration;
 - (v) light;
 - (vi) heat; and
 - (vii) radiation;
- (g) an outline of the main alternatives to the particular petroleum operations, if any, studied by the person and an indication of the main

reasons for the selection of the particular petroleum operations, taking into account the environmental effects;

- (h) a description of any difficulties, such as technical deficiencies or lack of knowledge and expertise, encountered in the preparation of the assessment; and
- (i) a summary, in non-technical language, of the information specified in paragraphs (a) to (h).

(2) The Designated Authority shall transmit to the Minister responsible for the Environment for approval, any environmental impact assessment submitted to the Designated Authority pursuant to these Regulations.

Environmental risk assessment

40. A licensee shall

- (a) make a suitable and sufficient assessment of the risks to the environment at and surrounding the petroleum facility of the licensee, as a result of the conduct of petroleum operations;
- (b) record the significant findings of the assessment and details of the aspects of the environment identified in the assessment as being especially at risk; and
- (c) review and update the assessment
 - (i) where there is reason to believe that it is no longer valid; or
 - (ii) in any event, at least every 5 years.

Environmental monitoring and audit

41.(1) A licensee shall conduct regular checks, inspections or examinations on equipment, management systems and operational activities specified in these Regulations or governed by best industry practice and document their effect on the environment.

- (2) A licensee shall
 - (a) cause to be conducted by a certified, independent environmental auditor, an annual environmental audit and review of the environmental management system of the licensee; and
 - (b) submit the results to the Designated Authority.
- (3) A licensee shall, upon request, provide the Designated Authority with the records of the activities conducted by the licensee pursuant to paragraph (1).

Spill response and clean-up procedures

- 42.(1)** Where a spill of petroleum, brine or a chemical occurs, a licensee shall take immediate measures, in accordance with the environmental plan of the licensee, to contain and clean up the spill as soon as practicable in order to minimise damage to the environment and improve the recyclability of the spilled material.
- (2) The Designated Authority may permit the disposal of recovered petroleum, brine or chemicals where
 - (a) recycling of the material is not feasible; and
 - (b) disposal is at an appropriately designed and operated disposal site.
 - (3) A licensee shall, to the satisfaction of the Designated Authority
 - (a) conduct the clean-up referred to in paragraph (1) in such a way as to protect the environment from further damage;
 - (b) ensure that further environmental damage does not result from the clean-up; and
 - (c) where practicable
 - (i) return any area which sustains damage or degradation to the condition in which it was before the spill;
 - (ii) mitigate damage to resources; and

(iii) implement measures for rehabilitation.

Notification of and reports on significant spills

43.(1) A licensee shall give the Designated Authority oral or written notification of

- (a) a major environmental incident, significant spill or release of gas or a hazardous substance, as soon as practicable and in any event, within 2 hours of the occurrence;
- (b) a process disruption or failure of plant or facilities that results in material losses of oil, gas or chemical substances, as soon as practicable and in any event, within 24 hours of the occurrence; and
- (c) a loss of a nominal quantity of oil, gas or chemical substances within 5 days of the occurrence.

(2) A licensee who gives oral notification pursuant to paragraph (1) shall as soon as practicable thereafter give written notification.

(3) A licensee shall include in a notification of a significant spill:

- (a) the nature of the spill, including whether it is of oil, produced water, acid or other liquid or solid materials that are identified as having a negative impact on the environment;
- (b) the estimated volume of the spill;
- (c) the location of the spill by well number, geographical coordinates or both; and
- (d) the response of the licensee to the spill, up to the time that notification is given.

(4) A licensee shall submit to the Designated Authority reports on any occurrence referred to in paragraph (1)(a) or (b) until the matter has been resolved to the satisfaction of the Designated Authority.

- (5) The licensee shall
- (a) unless the Designated Authority otherwise permits, submit the reports weekly; and
 - (b) include in the reports
 - (i) the extent to which the occurrence referred to in paragraph (1) (a) or (b) has been resolved; and
 - (ii) the period of time necessary for the complete resolution of the occurrence.

Annual environmental report

44.(1) A licensee shall, within 60 days after the end of an income year, submit to the Designated Authority an annual environmental report.

- (2) The licensee shall include in the report:
- (a) a summary of the petroleum operations conducted in the licence area;
 - (b) the environmental policy of the licensee;
 - (c) a brief description of the environmental management system of the licensee;
 - (d) a description of the significant direct and indirect environmental impacts of the petroleum operations and details of the measures taken or being taken to limit the impacts, including a brief description of the performance of the environmental management system of the licensee;
 - (e) a description of the environmental objectives and targets of the licensee in relation to the significant direct and indirect environmental impacts and the environmental risk assessment of the licensee;

- (f) a summary of the performance of the licensee in respect of the environmental objectives and targets referred to in paragraph (e) which
 - (i) may include data on emissions of pollutants, generation of waste, consumption of raw material, energy and water, noise and other relevant matters; and
 - (ii) facilitates a year-by-year comparison to assess the development of the environmental performance of the licensee; and
 - (g) the name of the environmental auditor who validated the annual environmental report and the date of validation.
- (3) The licensee shall ensure that the report is validated by a certified, independent environmental auditor.

PART VII

Health and Safety Obligations

Health and safety management system

45.(1) A licensee shall ensure that the health and safety management system of the licensee facilitates planning, implementation, operation, review, corrective action and continuous improvement in respect of processes which address, where applicable, the following:

- (a) health and safety assistance as referred to in regulation 51;
- (b) capabilities and training of personnel in respect of matters of health and safety;
- (c) a permit to work system;
- (d) safety information, signs and signals;
- (e) monitoring systems, alarms and fire-fighting equipment;
- (f) emergency planning and response;

- (g) emergency routes and exits;
 - (h) the reporting of major health and safety incidents; and
 - (i) the assessment, analysis and management of risks associated with
 - (i) the construction, maintenance and operation of petroleum facilities including
 - (A) the bulk storage of substances;
 - (B) construction activity;
 - (C) confined spaces;
 - (D) diving operations, where applicable;
 - (E) electrical systems;
 - (F) lifting equipment;
 - (G) major hazards;
 - (H) personal protective equipment;
 - (I) pressure and temperature systems;
 - (J) the use and provision of work equipment; and
 - (K) the prevention of falls and the falling of objects; and
 - (ii) harmful agents, including
 - (A) chemical agents: gases, liquids and solids;
 - (B) physical agents: noise, vibration, extreme temperatures, ionizing and non-ionizing radiation;
 - (C) biological agents; and
 - (D) explosive atmospheres.
- (2) The licensee shall review the health and safety management system at least every 5 years to take account of any changes in activities, practices or organisation relevant to the health and safety management system.

Health and safety policy

46.(1) A licensee shall prepare a written statement of the health and safety policy of the licensee and the organisational arrangements for the implementation of the policy.

(2) The licensee may include the statement of the health and safety policy in a combined statement of policy in respect of health and safety and the environment or any other matter.

(3) The licensee shall

- (a) review the policy at least every 5 years to take account of any changes in activities, practices or organisation relevant to the policy;
- (b) state in the policy, the arrangements for the inclusion of personnel in matters which relate to health and safety; and
- (c) make the policy available to personnel in any language necessary for effective communication.

Health and safety plan

47.(1) A licensee who holds an exploration or a production licence shall have a health and safety plan and ensure that the plan is based on the health and safety management system of the licensee.

(2) The licensee shall include in the plan in respect of

- (a) safety, training and accident response
 - (i) the safety measures and procedures to be used by the licensee during the conduct of petroleum operations;
 - (ii) the training programmes, frequency of training and safety manuals to be provided to personnel by the licensee or third party subcontractors during the conduct of petroleum operations;

- (iii) the accident response facilities to be used and supervisory staff to be responsible for investigations to be performed by the licensee in the event of a major health and safety incident during the conduct of petroleum operations; and
 - (iv) a list of the names, positions or job descriptions, addresses including electronic mail addresses, and telephone and facsimile numbers, where applicable, of the persons responsible for matters of safety including safety training and emergency response;
- (b) hazardous substances, a description of the emergency response measures to be organised or taken by the licensee in the event of
- (i) a spill or escape of hazardous substances; or
 - (ii) a fire, explosion or other circumstance which involves hazardous substances,
- during the conduct of petroleum operations; and
- (c) the petroleum facility, a general description of
- (i) the plans for the periodical, medical examination of personnel and details of all medical and first aid equipment;
 - (ii) the safety equipment and documents; and
 - (iii) the personal protection equipment,
- to be kept at the petroleum facility.
- (3) The licensee shall review the plan at least every 5 years to take account of any changes in activities, practices or organisation relevant to the plan.

Safety case

- 48.(1)** A licensee who holds a production licence shall
- (a) within 90 days of the issue of the licence, submit to the Designated Authority, a safety case; and

- (b) ensure that the safety case includes a full description of the features of the design of the petroleum facility and the procedures for its construction, commissioning and operation that are intended to ensure
 - (i) the protection of health and safety; and
 - (ii) that the risks from major hazards are at the lowest level that is reasonably practicable.
- (2) The licensee shall
 - (a) manage controls on risks identified in the safety case through the health and safety management system of the licensee, where appropriate; and
 - (b) review the safety case
 - (i) to take account of any significant planned changes to operational activity; or
 - (ii) in any event, at least every 5 years.

Health and safety risk assessment

- 49.** A licensee shall
- (a) make a suitable and sufficient assessment of the risks, as a result of the conduct of petroleum operations, to the health and safety of
 - (i) personnel at the petroleum facility of the licensee; and
 - (ii) other persons in reasonable proximity to the petroleum facility;
 - (b) record the significant findings of the assessment and details in respect of any person or group of persons identified in the assessment as being especially at risk; and
 - (c) review and update the assessment
 - (i) where there is reason to believe that it is no longer valid; or
 - (ii) in any event, at least every 5 years.

Health and safety monitoring and audit

50.(1) A licensee shall conduct regular checks, inspections or examinations on equipment, management systems and operational activities specified in these Regulations or governed by best industry practice and document their effect on health and safety.

(2) A licensee shall

(a) cause to be conducted by a certified, independent health and safety auditor, an annual health and safety audit and review of the health and safety management system of the licensee; and

(b) submit the results to the Designated Authority.

(3) A licensee shall, upon request, provide the Designated Authority with the records of the activities conducted by the licensee pursuant to paragraph (1).

Health and safety assistance

51.(1) A licensee shall appoint one or more competent persons to assist in the taking of the measures necessary to ensure that there is no unacceptable risk to the health and safety of personnel at or in close proximity to the petroleum facility of the licensee.

(2) Where a licensee appoints more than one person pursuant to paragraph (1), the licensee shall make arrangements for ensuring adequate cooperation among them.

(3) The licensee shall ensure that

(a) the number of persons appointed pursuant to paragraph (1) and the time and means available to the persons to fulfil their functions are adequate having regard to the size of the petroleum facility, the risks to which personnel are exposed and the distribution of those risks throughout the facility; and

- (b) each person has access to the information necessary to carry out the tasks required of the person.

Capabilities and training in health and safety

52.(1) A licensee shall, in assigning tasks to personnel related to health and safety, take into account the capabilities and level of training, knowledge and experience of the personnel.

(2) A licensee shall ensure that personnel are provided with adequate health and safety training upon

- (a) initial arrival at the petroleum facility of the licensee; and
- (b) being exposed to new or increased risks as a result of
 - (i) being transferred or given a change of responsibilities within the petroleum facility;
 - (ii) modifications or additions to the plant within the petroleum facility;
 - (iii) the introduction of a new system of work or a change in the system of work already in use within the petroleum facility; or
 - (iv) any other circumstance.

(3) The training referred to in paragraph (2) shall be

- (a) repeated periodically where appropriate; and
- (b) adapted to take account of any new or changed risks to the health and safety of the personnel at the petroleum facility.

Emergency planning and response

53.(1) Where an emergency arises a licensee shall promptly

- (a) take all measures necessary to mitigate any danger or damage to life, health or property, whether or not such measures are included in the emergency procedures established pursuant to paragraph (2); and

- (4) A licensee shall
 - (a) regularly review and update the emergency procedures; and
 - (b) develop, implement and practise emergency drills at regular intervals.

Major health and safety incident report

54.(1) A licensee shall submit to the Designated Authority, within 24 hours of a major health and safety incident, a major health and safety incident report in respect of the incident.

- (2) The licensee shall include in the report:
 - (a) the date, time, location including coordinates, and nature of the incident;
 - (b) the name and details of any person injured or killed;
 - (c) whether the person injured or killed is or was
 - (i) an employee of the licensee or a contractor or subcontractor of the licensee; or
 - (ii) not connected with the petroleum operations of the licensee;
 - (d) the name, address and telephone numbers including the business and mobile numbers, of the person responsible for the investigation of the incident;
 - (e) the name, address and telephone number of each potential witness known to the licensee; and
 - (f) the type and extent of damage resulting from the incident, including primary losses and secondary impacts on the petroleum operations.
- (3) The licensee shall submit to the Designated Authority, upon completion of investigations, a final report and conclusion in respect of the major health and safety incident.

Annual health and safety report

55.(1) A licensee shall submit to the Designated Authority, within 60 days after the end of an income year, an annual health and safety report.

(2) The licensee shall include in the report:

- (a) a summary of the petroleum operations conducted in the licence area of the licensee;
- (b) the health and safety policy of the licensee;
- (c) a brief description of the health and safety management system of the licensee;
- (d) a description of the significant risks to the health and safety of persons at or in close proximity to the petroleum facility of the licensee and details of the measures taken or being taken to limit those risks, including a brief description of the performance of the health and safety management system of the licensee;
- (e) a description of the health and safety objectives and targets of the licensee in relation to the health and safety risk assessment of the licensee;
- (f) a summary of the performance of the licensee in respect of the health and safety objectives and targets referred to in paragraph (e), which facilitates a year-by-year comparison to assess the development of the performance of the licensee; and
- (g) the name of the health and safety auditor who validated the report and the date of validation.

(3) The licensee shall ensure that the report is validated by a certified, independent health and safety auditor.

PART VIII

*Local Content***Training plan**

56.(1) A licensee who holds an exploration or a production licence shall, within 30 days prior to the commencement of an income year, submit for the approval of the Designated Authority, a training plan for the training of residents of Barbados.

- (2) The licensee shall include in the plan provision for
- (a) in-house training;
 - (b) institutional, tertiary training;
 - (c) training of personnel employed by the Designated Authority;
 - (d) training of personnel employed by a state entity;
 - (e) acceptance of interns;
 - (f) all positions including administrative, technical and executive management positions in respect of
 - (i) the conduct of petroleum operations;
 - (ii) the provision of goods and services related to the conduct of petroleum operations; and
 - (iii) the private sector, state entities and the Crown;
 - (g) the transfer of knowledge of petroleum technology and the necessary management experience in order to enable residents of Barbados to use, in petroleum operations, the most advanced and appropriate technology available including proprietary and patented technology, and other confidential technology, subject to appropriate confidentiality agreements; and

- (h) the replacement, by residents of Barbados, of the personnel of the licensee who are not residents of Barbados.
- (3) The Designated Authority shall determine an application for approval of a training plan within 30 days of receipt of the plan.
- (4) A licensee shall not amend a training plan previously approved by the Designated Authority without the approval of the Designated Authority.
- (5) Where a licensee applies for approval to amend a training plan previously approved by the Designated Authority, the Designated Authority shall determine the application within 30 days of its receipt.
- (6) Where the Designated Authority does not approve a training plan or an amendment to a training plan previously approved by the Designated Authority, the Designated Authority shall notify the licensee of
 - (a) the reason for the decision; and
 - (b) the measures that the licensee is required to take for the plan or amendment to be approved.
- (7) A licensee who receives notification pursuant to paragraph (6) shall, within 30 days of receipt of the notification, revise the plan or amendment in accordance with the measures specified by the Designated Authority and resubmit the plan or amendment for approval.
- (8) The Designated Authority shall determine an application for approval of a training plan or amendment revised pursuant to paragraph (7) within 30 days of receipt of the plan or amendment.

Minimum annual training expenditure

- 57.** A licensee shall incur, pursuant to section 48 of the Act, a minimum annual training expenditure
- (a) in an amount no less than the amount set out in the *First Schedule*; and
 - (b) in accordance with a training plan approved pursuant to regulation 56.

Procurement of goods and services

- 58.(1)** A licensee shall, unless the Designated Authority expressly authorises purchase from a single source, seek competitive bids for any supply, construction or service contract which is budgeted to exceed one million dollars.
- (2) The licensee shall not unduly break down any supply, construction or service contract into component parts.
- (3) The licensee shall shortlist all bids which are acceptable for technical and economic reasons, selecting the successful bid from this shortlist.
- (4) The licensee shall submit to the Designated Authority, a copy of all the aforementioned contracts concluded by the licensee and other contracts pertaining to the conduct of petroleum operations as soon as reasonably practicable after the execution of the contracts.

Annual procurement plan

- 59.(1)** A licensee shall, 15 days prior to the commencement of an income year, submit to the Designated Authority for approval, a procurement plan in respect of the year.
- (2) The licensee shall in the plan
- (a) include a list of contracts for equipment, facilities, goods, materials, supplies and services required for petroleum operations in the following year;
 - (b) identify any equipment, facilities, goods, materials, supplies and services on the list which the licensee believes are not available from suppliers that are resident in Barbados; and
 - (c) provide details of the process to be used to procure goods and services.
- (3) The Designated Authority shall determine an application for approval of a procurement plan within 30 days of receipt of the plan.

- (4) Where the Designated Authority does not approve a procurement plan the Designated Authority shall notify the licensee of
- (a) the reason for the decision; and
 - (b) the measures that the licensee is required to take for the plan to be approved.
- (5) A licensee who receives notification pursuant to paragraph (4) shall revise the plan in accordance with the measures specified by the Designated Authority and resubmit the plan for approval.
- (6) The Designated Authority shall determine an application for approval of a procurement plan revised pursuant to paragraph (5) within 30 days of receipt of the plan.
- (7) Where the Designated Authority approves a procurement plan, the Designated Authority shall make the plan available for inspection by the public by publication in at least 2 daily newspapers and by any other means, including electronic means.
- (8) A licensee shall, where reasonably practicable, procure goods and services required for petroleum operations in accordance with the procurement plan of the licensee.

Recruitment plan

- 60.(1)** A licensee shall, 30 days prior to the commencement of an income year, submit to the Designated Authority for approval, a recruitment plan in respect of the year.
- (2) The licensee shall include in the plan:
- (a) the process to be utilised for employing personnel;
 - (b) the programme to be implemented for the gradual replacement of foreign personnel by residents of Barbados including the action to occur in the year;

- (c) details of all new positions to be filled during the year including the title, level, responsibility and required skill set; and
 - (d) details of all payments, benefits and privileges accorded to each classified category of the personnel of the licensee to ensure that all personnel in the same category enjoy equal conditions irrespective of nationality.
- (3) The Designated Authority shall determine an application for approval of a recruitment plan within 30 days of receipt of the plan.
- (4) Where the Designated Authority does not approve a recruitment plan the Designated Authority shall notify the licensee of
 - (a) the reason for the decision; and
 - (b) the measures that the licensee is required to take for the plan to be approved.
- (5) A licensee who receives notification pursuant to paragraph (4) shall revise the plan in accordance with the measures specified by the Designated Authority and resubmit the plan for approval.
- (6) The Designated Authority shall determine an application for approval of a recruitment plan revised pursuant to paragraph (5) within 30 days of receipt of the plan.

Annual local content report

- 61.(1)** A licensee shall, within 60 days after the end of an income year, submit to the Designated Authority, an annual local content report in respect of the year.
- (2) The licensee shall include in the report:
 - (a) a summary of all goods and services procured pursuant to the fulfilment of the rights and obligations of the licensee under the Act and these Regulations;

- (b) a summary of all personnel employed either on contract or on a permanent basis by the licensee pursuant to the fulfilment of the rights and obligations of the licensee under the Act and these Regulations;
- (c) an itemisation of the training undertaken pursuant to section 40 of the Act, including the cost of the training and any deviation from the training plan approved pursuant to regulation 56; and
- (d) a summary of the performance of the licensee in respect of the matters referred to in paragraphs (a), (b) and (c) in comparison with previous years.

PART IX

Decommissioning

Permission to leave petroleum facility on seabed

62. The Designated Authority shall, in determining whether to permit a licensee who is required to decommission to leave a petroleum facility or any part thereof on the seabed, make a case-by-case evaluation of the facility taking into account

- (a) any potential effect on the safety of surface or subsurface navigation or of other uses of the sea;
- (b) the rate of deterioration of the material and its current and potential effect on the environment;
- (c) the risk that the material may shift from its current position;
- (d) the costs, technical feasibility and risk of injury to personnel associated with removal of the facility; and
- (e) the determination of a new use or other reasonable justification for permitting the facility or any part thereof to remain on the seabed.

Responsibility for Decommissioning Fund upon assignment of licence

- 63.**(1) Where a licensee assigns a licence, the assignee shall
- (a) be liable to make contributions to the Decommissioning Fund; and
 - (b) have the same rights in respect of the Fund as those previously possessed by the licensee.
- (2) The licensee shall ensure that
- (a) the agreement relating to the assignment of the licence specifies the date of assignment and identifies the petroleum facilities to be assigned to the assignee; and
 - (b) contributions to the Decommissioning Fund for which the licensee is liable up to the date of the assignment, are submitted to the Designated Authority before the assignment is concluded.

Post-decommissioning report

- 64.**(1) A licensee shall, upon the completion of decommissioning operations, demonstrate to the Designated Authority that the licensee has decommissioned in accordance with the decommissioning plan approved by the Designated Authority.
- (2) The licensee shall, within 90 days of the completion of decommissioning operations, submit to the Designated Authority a post-decommissioning report.
- (3) The licensee shall include in the report:
- (a) the decommissioning operations conducted;
 - (b) information that demonstrates that the decommissioning operations have been conducted in accordance with the decommissioning plan of the licensee;
 - (c) an explanation of any significant variations from the decommissioning plan including the reason for the deviation;

- (d) an indication of the actual cost of decommissioning and an explanation of any difference between the actual cost and the estimated cost; and
- (e) the measures taken to manage the potential risks associated with any petroleum facility or part thereof which the Designated Authority permits the licensee to leave on the seabed.

PART X

Crown Participation

Crown participation

65. Pursuant to section 43(1A) of the Act, the level of participation by the Crown in each block described in Part I of the *Second Schedule* is that set out in Part II of that Schedule.

PART XI

Miscellaneous

Safety zones

66. The Designated Authority may, by notification published in the *Official Gazette*,

- (a) declare a safety zone around a petroleum facility which may extend to a distance of 500 metres from the boundary of the facility; and
- (b) prohibit all vessels or vessels other than those specified in the notification from entering or remaining in the safety zone without the prior approval of the operator of the facility.

Annual financial reports

67.(1) A licensee shall, within 120 days of the end of an income year, submit to the Designated Authority, a copy of its financial and statistical report, expressed in Barbadian dollars.

(2) The licensee shall include in the report:

- (a) a declaration in respect of offshore petroleum income tax and offshore petroleum additional profits tax which outlines amortisation practised on the expenses related to tangible and intangible real estate properties;
- (b) an annual petroleum account report prepared and delivered in respect of the income year and including:
 - (i) costs as provided in the corresponding budget and other costs incurred in the income year;
 - (ii) the receipts for the income year; and
 - (iii) the latest forecast of cumulative costs and receipts, if any, expected by the end of the income year; and
- (c) a report on the market value and pricing of petroleum delivered in respect of the income year including
 - (i) the volumes, prices and receipts realised for petroleum as a result of an arm's length sale or other appropriate method of disposal, conducted during the income year;
 - (ii) the volumes, prices and receipts realised for petroleum as a result of a non-arm's length sale or other appropriate method of disposal, conducted during the income year;
 - (iii) any information available to the licensee, for the purpose of the calculation and determination of the market value of petroleum, including an itemised list of all petroleum sales made, and prices obtainable on spot and other world markets;

- (iv) a detailed breakdown of the calculation and determination of the licensee of the market value of petroleum for the income year;
- (v) the market value of petroleum stocks held on the first day of the income year; and
- (vi) the market value of petroleum stocks held on the last day of the income year.

Fees

68. The fees to be paid pursuant to the Act are specified in the *Third Schedule*.

Royalties

69. The rate at which royalty is to be paid pursuant to section 49 of the Act is 3 per cent.

Administrative penalties

70. The administrative penalties which may be imposed pursuant to section 56 of the Act are specified in the *Fourth Schedule*.

Forms

71. The forms to be used pursuant to the Act are set out in the *Fifth Schedule*.

FIRST SCHEDULE*(Regulation 57)***MINIMUM ANNUAL TRAINING EXPENDITURE**

| <i>Licence</i> | <i>Expenditure</i> |
|--|--------------------|
| | \$ |
| 1. Exploration licence..... | 200,000 |
| 2. Extension of exploration licence..... | 200,000 |
| 3. Production licence..... | 400,000 |
| 4. Extension of production licence..... | 400,000 |

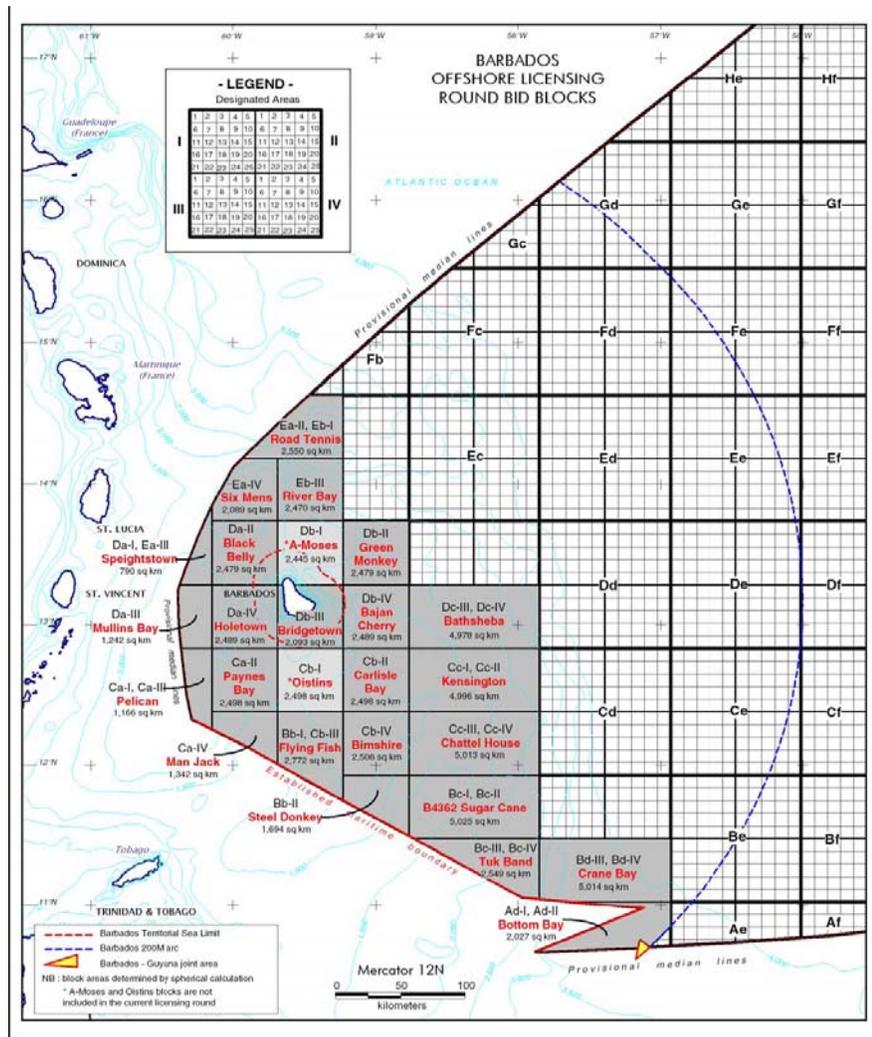
SECOND SCHEDULE

(Regulation 65)

CROWN PARTICIPATION IN OFFSHORE
PETROLEUM OPERATIONS

Part I

Blocks



SECOND SCHEDULE - (Cont'd)

*Part II**Crown Participation In Each Block*

| <i>Block Name</i> | <i>Level of Crown Participation</i> |
|--------------------------------|-------------------------------------|
| Da-II Black Belly 2,479 | 20% |
| Cb-II Carlisle Bay 2,498 | 20% |
| Bb-I, Cb-III Flying Fish 2,772 | 20% |
| Cb-IV Bimshire 2,506 | 20% |
| Bb-II Steel Donkey 1,694 | 20% |
| Db-III Bridgetown 2,093 | 20% |
| Ea-IV Six Mens 2,089 | 15% |
| Da-I, Ea-III Speightstown 790 | 15% |
| Da-III Mullins Bay 1,242 | 15% |
| Da-IV Holetown 2,489 | 15% |
| Ca-I, Ca-III Pelican 1,166 | 15% |
| Ca-II Paynes Bay 2,498 | 15% |
| Ca-IV Man Jack 1,342 | 15% |
| Ea-II, Eb-I Road Tennis 2,550 | 10% |
| Eb-III River Bay 2,470 | 10% |
| Db-II Green Monkey 2,479 | 10% |

SECOND SCHEDULE - (Concl'd)

*Part II - Concl'd**Participation In Each Block*

| <i>Block Name</i> | <i>Level of Crown Participation</i> |
|-------------------------------------|-------------------------------------|
| Db-IV Bajan Cherry 2,489 | 10% |
| Ed-III, Ed-IV Bathsheba 4,978 | 10% |
| Cc-I, Cc-II Kensington 4,996 | 10% |
| Cc-III, Cc-IV Chattel House 5,013 | 10% |
| Bc-I, Bc-II B 4362 Sugar Cane 5,025 | 10% |
| Bc-III, Bc-IV Tuk Band 2,549 | 10% |
| Bd-III, Bd-IV Crane Bay 5,014 | 10% |
| Ad-I, Ad-I Bottom Bay 2,027 | 10% |

THIRD SCHEDULE

(Regulation 68)

FEES

| <i>Application Fees</i> | \$ |
|---|--------|
| 1. Application to qualify as an operator or participant | 2,000 |
| 2. Application for a reconnaissance licence | 2,000 |
| 3. Application for an extension of a reconnaissance licence... .. | 2,000 |
| 4. Application for an exploration licence | 5,000 |
| 5. Application for an extension of an exploration licence | |
| (a) to locate a market for a discovery of non-associated gas | 8,000 |
| (b) to complete appraisal activities... .. | 5,000 |
| 6. Application for a production licence | 10,000 |
| 7. Application for an extension of a production licence | 10,000 |
| 8. Application for approval to amend a work programme | 4,000 |
| 9. Application for approval to transfer a licence | 4,000 |
| 10. Application for approval to surrender a licence | 4,000 |

THIRD SCHEDULE - (Cont'd)

FEES - (Cont'd)

| <i>Reconnaissance Licence Fee and Annual Area Fees</i> | \$ |
|--|--|
| 1. Reconnaissance Licence | 4,000 |
| 2. Exploration Licence, in respect of | |
| (a) years 1 and 2 | 10 per km ² of licence area per year |
| (b) years 3 and 4 | 20 per km ² of licence area per year |
| (c) years 5 and 6 | 30 per km ² of licence area per year |
| (d) years 7 and 8 | 40 per km ² of licence area per year |
| 3. Extension of an exploration licence | |
| (a) to locate a market for a discovery of non-associated gas | 20,000 per year |
| (b) to complete appraisal activities ... | 10,000 per year |
| 4. Production licence | 50,000 per year |
| 5. Extension of a production licence | 50,000 per year |

THIRD SCHEDULE - (Concl'd)

FEES - (Concl'd)

| <i>Minimum Annual Coastal and Marine Environment Research Fees</i> | \$ |
|--|---------|
| 1. Exploration licence | 100,000 |
| 2. Extension of an exploration licence... .. | 100,000 |
| 3. Production licence | 200,000 |
| 4. Extension of a production licence ... | 200,000 |

FOURTH SCHEDULE

(Regulation 70)

ADMINISTRATIVE PENALTIES

| <i>Contravention</i> | <i>Penalty</i> | <i>Additional Daily Penalty for every day or part thereof that the contravention continues</i> |
|--|----------------|--|
| | \$ | \$ |
| 1. Failure to comply with general application requirements | 5,000 | |
| 2. Failure to comply with general notification requirements | 5,000 | |
| 3. Relinquishment of area in a manner inconsistent with these Regulations... | 25,000 | 2,500 |
| 4. Failure to submit particulars of discovery when required | 12,500 | 1,250 |
| 5. Failure to submit appraisal plan when required | 12,500 | 1,250 |
| 6. Failure to comply with well naming and numbering requirements | 5,000 | 500 |
| 7. Failure to submit an exploration survey notification when required ... | 12,500 | |
| 8. Failure to submit a drilling activity notification when required | 12,500 | |

FOURTH SCHEDULE - (Cont'd)

ADMINISTRATIVE PENALTIES - (Cont'd)

| <i>Contravention</i> | <i>Penalty</i> | <i>Additional Daily Penalty for every day or part thereof that the contravention continues</i> |
|---|----------------|--|
| | \$ | \$ |
| 9. Failure to submit all data and information required, pursuant to section 52 of the Act, to be submitted to the Designated Authority as soon as practicable after they become available... .. | 25,000 | |
| 10. Failure to comply with confidentiality provisions | 25,000 | |
| 11. Failure to submit joint operating agreement when required | 25,000 | 2,500 |
| 12. Failure to comply with general reporting requirements | 5,000 | 500 |
| 13. Failure to submit exploration report when required | 25,000 | 2,500 |
| 14. Failure to submit daily drilling report when required | 5,000 | 500 |
| 15. Failure to submit sample analysis report when required | 12,500 | 1,250 |
| 16. Failure to submit well completion report when required | 12,500 | 1,250 |

FOURTH SCHEDULE - (Cont'd)

ADMINISTRATIVE PENALTIES - (Cont'd)

| <i>Contravention</i> | <i>Penalty</i> | <i>Additional Daily Penalty for every day or part thereof that the contravention continues</i> |
|--|----------------|--|
| | \$ | \$ |
| 17. Failure to submit well test analysis report when required | 12,500 | 1,250 |
| 18. Failure to submit monthly production report when required | 25,000 | 2,500 |
| 19. Failure to submit annual production report when required | 12,500 | 1,250 |
| 20. Failure to submit results of annual production test when required | 25,000 | 2,500 |
| 21. Failure to submit annual reserves report when required | 12,500 | 1,250 |
| 22. Failure to submit post-decommissioning report when required | 25,000 | 2,500 |
| 23. Failure to submit annual environmental report when required | 25,000 | 2,500 |
| 24. Failure to submit annual health and safety report when required | 25,000 | 2,500 |

FOURTH SCHEDULE - (Concl'd)

ADMINISTRATIVE PENALTIES - (Concl'd)

| <i>Contravention</i> | <i>Penalty</i> | <i>Additional Daily Penalty for every day or part thereof that the contravention continues</i> |
|---|----------------|--|
| | \$ | \$ |
| 25. Failure to submit significant spill notification when required | 25,000 | 2,500 |
| 26. Failure to submit major health and safety incident report when required | 25,000 | 2,500 |
| 27. Failure to submit annual financial report when required | 25,000 | 2,500 |
| 28. Failure to submit training plan when required | 12,500 | 1,250 |

FIFTH SCHEDULE

(Regulation 71)

FORMS

***FORM OF RECONNAISSANCE LICENCE/
RECONNAISSANCE LICENCE EXTENSION***

[Note: All information appearing in brackets in italics are instructions for the completion of the licence, please delete the instructions before the licence is issued.]

BARBADOS**FORM 1****RECONNAISSANCE LICENCE/RECONNAISSANCE
LICENCE EXTENSION**

NO. _____

1. This Reconnaissance Licence (hereinafter called the "Licence") is effective as of the _____ day of _____, 2013 (hereinafter called the "effective date").

Interpretation

2. In this Licence, unless the context indicates otherwise:

- (a) "Act" means the *Offshore Petroleum Act, 2007* or any Act Act 2007-30. substituted therefor;

- (b) "Regulations" means Regulations made under the Act; and
- (c) words and expressions defined in the Act or Regulations and used in this Licence have the same meaning in this Licence as they have in the Act or Regulations.

Licensee

3. This Licence is issued to:
(hereinafter called the "Licensee"):

(a) Name:

Address:

Interest share of the Licence: %

(b) Name:

Address:

Interest share of the Licence: %

[Complete this section for each person with an interest share in the Licence.]

Reconnaissance Rights

4. This Licence gives the Licensee a non-exclusive right to conduct the activities specified in Schedule 1 in the Licence Area specified in paragraph 5.

Licence Area

5. The Licence Area, shown on the map in Schedule 2, is defined by the following coordinates delineated according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84:

Total area (km²):

Duration of the Licence

6. This Licence is valid for a period of [] months commencing on the effective date.

Special Conditions

7. This Licence shall be subject to any special conditions specified in Schedule 3.

[Special conditions may relate to data, confidentiality, data sale conditions and payment to the Crown.]

Application of Barbadian Law

8. All activities conducted under this Licence shall be governed by the laws of Barbados.

SCHEDULE 1

Reconnaissance Activities

[Specify the reconnaissance activities to be conducted by the Licensee.]

SCHEDULE 2

Map of Licence Area

[Insert map of Licence Area]

SCHEDULE 3

Conditions of Licence

[Specify any special conditions of the Licence]

This Licence is issued in
by the Designated Authority.

originals, of which one is retained

Designated Authority

Bridgetown, _____, 2013.

FORM OF EXPLORATION LICENCE

[Note: All information appearing in brackets in italics are instructions for the completion of the licence, please delete the instructions before the licence is issued.]

BARBADOS



FORM 2

EXPLORATION LICENCE

NO. _____

Commencement

1. This Exploration Licence (hereinafter called the "Licence") is effective as of the _____ day of _____, 2013 (hereinafter called the "effective date").

Interpretation

2. In this Licence, unless the context indicates otherwise:

- (a) "Act" means the *Offshore Petroleum Act, 2007* or any Act substituted therefor; Act 2007-30.
- (b) "Regulations" means Regulations made under the Act; and
- (c) words and expressions defined in the Act or Regulations and used in this Licence have the same meaning in this Licence as they have in the Act or Regulations.

Licensee

3. This Licence is issued to:
(hereinafter called the "Licensee"):

(a) Name:

Address:

Interest share of the Licence: %

(b) Name:

Address:

Interest share of the Licence: %

[Complete this section for each person with an interest share in the Licence.]

Exploration Rights

4. This Licence gives the Licensee an exclusive right to explore for and to appraise, petroleum in the Licence Area specified in paragraph 5.

Licence Area

5. The Licence Area, shown on the map in the Schedule, is defined by the following coordinates delineated according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84:

Total area (km²):

Duration of Licence

6. This Licence is valid for a period of [] years, divided into consecutive phases as follows:

Phase 1: years

Phase 2: years

Phase 3: years.

[Add or delete phases as necessary.]

Crown Participation

[If no Crown Participation is applicable, please state "Not Applicable" under this heading. If Crown Participation is applicable, please select one of the two options under this heading and delete the other.]

7. (1) A % interest in this Licence shall be reserved for the following state entity, hereinafter called the "Crown Participant"):

Name:

Address:

(2) The interest shall be subject to the following conditions:

[Insert information regarding whether the interest is to be carried in whole or part, repaid in whole or part, or subject to payment of accrued expenditure in whole or part.]

OR

7. (1) A % interest shall be reserved in any Production Licence where this Licence leads to the discovery of the field in respect of which the Production Licence is issued.

(2) The Crown Participant shall exercise the interest referred to in sub-paragraph (1) during the period for application for the Production Licence.

Name:

Address:

(3) The interest shall be subject to the following conditions:

[Insert information regarding whether the interest is to be carried in whole or part, repaid in whole or part, or subject to payment of accrued expenditure in whole or part.]

Operator

8. (1) The operator designated to execute and cause to be executed, all the work inherent in this Licence is:

Name:

Address:

(2) Any change of operator shall require prior authorisation from the Designated Authority.

Work Programme

9. (1) The Licensee shall carry out minimum work commitments in each phase of this Licence as follows:

[Complete or delete as appropriate.]

Phase 1:

Studies:

Seismic:

Drilling:

Estimated expenditure committed:

Phase 2:

Studies:

Seismic:

Drilling:

Estimated expenditure committed:

Phase 3:

Studies:

Seismic:

Drilling:

Estimated expenditure committed:

(2) The Licensee must obtain the approval of the Designated Authority to amend this work programme.

Guarantee

10. Within 60 days of the effective date of each phase of the work programme specified in paragraph 9, the Licensee shall provide the Designated Authority with a guarantee for the sum of [] in order to guarantee the performance of the phase.

Minimum Annual Training Expenditure

11. (1) For the purpose of the training of residents of Barbados and in accordance with the Regulations, the Licensee commits, subject to subparagraph (2), to the following minimum annual training expenditure:

- (a) for the duration of this Licence:
- (b) for the duration of the Production Licence where this Licence leads to the discovery of the field in respect of which the Production Licence is issued:

(2) The minimum annual training expenditure specified in subparagraph (1) shall be increased annually at a rate equivalent to the United States Industrial Goods Producer Price Index (USIGPPI) plus three per cent.

Coastal and Marine Environment Research Fees

12. (1) For the purpose of coastal and marine environmental research, the Licensee agrees, subject to sub-paragraph (2), to pay the Designated Authority the following annual coastal and marine environment research fee:

- (a) for the duration of this Licence:
- (b) for the duration of the Production Licence where this Licence leads to the discovery of the field in respect of which the Production Licence is issued:

(2) The annual fee specified in sub-paragraph (1) shall be increased annually at a rate equivalent to the United States Industrial Goods Producer Price Index (USIGPPI) plus three per cent.

Joint Operating Agreement

[If there is only one Licensee, please state "Not Applicable" under this heading.]

13. (1) Where there is more than one party to this Licence, a joint operating agreement shall be presented to the Designated Authority no later than 60 days after the issue of this Licence.

(2) Any amendments to the joint operating agreement submitted to the Designated Authority shall be subject to the approval of the Designated Authority.

Application of Barbadian Law

14. All activities conducted under this Licence shall be governed by the laws of Barbados.

SCHEDULE

Map of Licence Area

[Insert map of Licence Area.]

This Licence is issued in
the Designated Authority.

originals, of which one is retained by

Designated Authority

Bridgetown, _____, 2013.

FORM OF EXPLORATION LICENCE EXTENSION

[Note: All information appearing in brackets in italics are instructions for the completion of the licence, please delete the instructions before the licence is issued.]

BARBADOS



FORM 3

EXPLORATION LICENCE EXTENSION

NO. _____

Commencement

1. This Exploration Licence Extension (hereinafter called the "Licence") is effective as of the _____ day of _____, 2013 (hereinafter called the "effective date").

Interpretation

2. In this Licence, unless the context indicates otherwise:

- (a) "Act" means the *Offshore Petroleum Act, 2007* or any Act substituted therefor; Act 2007-30.
- (b) "Regulations" means Regulations made under the Act; and
- (c) words and expressions defined in the Act or Regulations and used in this Licence have the same meaning in this Licence as they have in the Act or Regulations.

Licensee

3. This Licence is issued to
(hereinafter called the "Licensee"):

(a) Name:

Address:

Interest share of the Licence: %

(b) Name:

Address:

Interest share of the Licence: %

[Complete this section for each person with an interest share in the Licence.]

Exploration Rights

4. This Licence gives the Licensee the exclusive right to undertake the activities specified in Schedule 1 within the Licence Area specified in paragraph 5.

Licence Area

5. The Licence Area, shown on the map in Schedule 2, is defined by the following coordinates delineated according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84:

Total area (km²):

Duration of Licence

6. This Licence is valid for a period of:

Crown Participation

7. (1) Where the Exploration Licence which led to the discovery of the field in respect of which this Licence is issued included a provision for Crown Participation which was exercised for the Exploration Licence, that right of Crown Participation including all conditions stated in the Exploration Licence in respect of it shall equally apply for the duration of this Licence as follows:

[Repeat the provisions that were in the original Exploration Licence in relation to Crown Participation.]

Operator

8. (1) The operator designated to execute and cause to be executed all the work inherent in this Licence is:

Name:

Address:

(2) Any change of operator shall require prior authorisation from the Designated Authority.

Minimum Annual Training Expenditure

9. (1) For the purpose of the training of residents of Barbados and in accordance with the Regulations, the Licensee commits, subject to subparagraph (2), to the following minimum annual training expenditure:

(a) for the duration of this Licence:

(b) for the duration of the Production Licence where this Licence applies in respect of the field in respect of which a Production Licence is issued:

(2) The minimum annual training expenditure specified in sub-paragraph (1) shall be increased annually at a rate equivalent to the United States Industrial Goods Producer Price Index (USIGPPI) plus three per cent.

[Repeat the information that was included in the original Exploration Licence.]

Coastal and Marine Environment Research Fees

10. (1) For the purpose of coastal and marine environmental research, the Licensee agrees, subject to sub-paragraph (2), to pay the Designated Authority the following annual coastal and marine environment research fee:

- (a) for the duration of this Licence:
- (b) for the duration of the Production Licence where this Licence applies in respect of the field in respect of which a Production Licence is issued:

(2) The annual fee specified in sub-paragraph (1) shall be increased annually at a rate equivalent to the United States Industrial Goods Producer Price Index (USIGPPI) plus three per cent.

[Repeat the information that was included in the original Exploration Licence.]

Joint Operating Agreement

[If there is only one Licensee, please state "Not Applicable" under this heading.]

11. Any amendments to the joint operating agreement submitted to the Designated Authority shall be subject to the approval of the Designated Authority.

Application of Barbadian Law

12. All activities conducted under this Licence shall be governed by the laws of Barbados.

SCHEDULE 1

[Insert activities to be conducted under Licence.]

SCHEDULE 2

Map of Licence Area

[Insert map of Licence Area.]

This Licence is issued in _____ originals, of which one is retained by the Designated Authority.

Designated Authority

Bridgetown, _____, 2013.

**FORM OF PRODUCTION LICENCE/PRODUCTION
LICENCE EXTENSION**

[Note: All information appearing in brackets in italics are instructions for completion of the licence, please delete the instructions before the licence is issued.]

BARBADOS



FORM 4

**PRODUCTION LICENCE/PRODUCTION LICENCE
EXTENSION**

NO. _____

Commencement

1. This Production Licence (hereinafter called the "Licence"), is effective as of the _____ day of _____, 2013 (hereinafter called the "effective date").

Interpretation

2. In this Licence, unless the context indicates otherwise:

- (a) "Act" means the *Offshore Petroleum Act, 2007* or any Act Act 2007-30 substituted therefor;
- (b) "Regulations" means Regulations made under the Act; and
- (c) words and expressions defined in the Act or Regulations and used in this Licence have the same meaning in this Licence as they have in the Act or Regulations.

Licensee

3. This Licence is issued to:
(hereinafter called the "Licensee"):

(a) Name:

Address:

Interest share of the Licence: %

(b) Name:

Address:

Interest share of the Licence: %

[Complete this section for each person with an interest share in the Licence.]

Production Rights

4. This Licence gives the Licensee an exclusive right to develop and produce petroleum in the Licence Area specified in paragraph 5.

Licence Area

5. The Licence Area, shown on the map in the Schedule, is defined by the following coordinates delineated according to the Mercator projection (21N latitude of true scale) referred to in the International Geodesic System WGS-84:

Total area (km²):

Duration of Licence

6. This Licence is valid for a period of _____ years.

Operator

7. (1) The operator designated to execute and cause to be executed, all the work inherent in this Licence is:

Name:

Address:

(2) Any change of operator shall require prior authorisation from the Designated Authority.

Crown Participation

[If no Crown Participation is provided for, please state "Not Applicable" under this heading.]

8. (1) A _____ % interest in this Licence shall be reserved for the following state entity, (hereinafter called the "Crown Participant"):

Name:

Address:

(2) The interest shall be subject to the following conditions:

[Insert information regarding whether the interest is to be carried in whole or part, repaid in whole or part, or subject to payment of accrued expenditure in whole or part.]

Royalty

9. The Licensee shall pay the Designated Authority a royalty equal to % of petroleum recovered in the Licence Area in accordance with the Act.

Minimum Annual Training Expenditure

10. (1) For the purpose of the training of residents of Barbados and in accordance with the Regulations, the Licensee commits, subject to sub-paragraph (2), to the following minimum annual training expenditure for the duration of this Licence: _____.

(2) The minimum annual training expenditure specified in sub-paragraph (1) shall be increased annually at a rate equivalent to the United States Industrial Goods Producer Price Index (USIGPPI) plus three per cent.

Coastal and Marine Environment Research Fees

11. (1) For the purpose of coastal and marine environmental research, the Licensee agrees, subject to sub-paragraph (2), to pay the Designated Authority the following annual coastal and marine environment research fee for the duration of this Licence: _____.

(2) The annual fee specified in sub-paragraph (1) shall be increased annually at a rate equivalent to the United States Industrial Goods Producer Price Index (USIGPPI) plus three per cent.

Domestic Supply

12. The Licensee shall, on receipt of written notice from the Designated Authority, sell to the Crown or a state entity as stated in the written notice, the amount of the Licensee's recovered petroleum stated in the written notice, at international market rates.

Joint Operating Agreement

[If there is only one Licensee, please state "Not Applicable" under this heading.]

13. (1) Where there is more than one party to this Licence, a joint operating agreement shall be presented to the Designated Authority no later than 60 days after the issue of this Licence.

(2) Any amendments to the joint operating agreement submitted to the Designated Authority shall be subject to the approval of the Designated Authority.

Unitisation

14. (1) The Licensee shall, on receipt of written notice from the Designated Authority, jointly develop a field in the Licence Area with a neighbouring licensee under a unitisation agreement.

(2) The Licensee shall negotiate the terms and conditions of the unitisation agreement with the neighbouring licensee.

Application of Barbadian Law

15. All activities conducted under this Licence shall be governed by the laws of Barbados.

SCHEDULE

Map of Licence Area

[Insert map of Licence Area.]

This Licence is issued in _____ originals, of which one is retained by the Designated Authority.

Designated Authority

Bridgetown, _____, 2013.

Made by the Minister this _____ day of _____, 2013.

Minister Responsible for Energy