

Petroleum Activities Regulations for Lebanon

Implementing Law no. 132 dated 24/8/2010 (Offshore Petroleum Resources)

Considering Law no. 132 dated 24/8/2010 (Offshore Petroleum Resources),

Considering Decree no. 7968 dated 7/4/2012 (The Petroleum Administration),

Considering Decree no. 5818 of 13/6/2011 (Formation of the government),

Considering Decree no. 9438 dated 4/12/2012 (Appointment of the Petroleum Administration),

Considering the proposal of the Ministry of Energy and Water,

After consulting the State Council, Opinion no. 159 dated 18/2/2013,

Following the approval of the Council of Ministers at its meeting of 27/2/2013,

Enacts the following:

Chapter 1 Introductory Provisions

Article 1. Definitions:

In addition to definitions included in the Offshore Petroleum Resource Law, the following definitions shall apply:

“Affiliated Company” means a company that Controls the legal person to which it is directly or indirectly related, or that is subject, whether directly or indirectly, to the Control of this latter, or that is under common Control with such specified company, to a third company.

“Control” means, with respect to a company, the ownership of a majority of the voting capital of such company or the power to appoint a majority of the board of directors or similar management body of such company.

“Barrel” means the volumetric quantity equivalent to 159 metric litres.

“Capital Expenditure” means the funds paid for the acquisition of new fixed assets or performing improvements which extend the life or increase the productivity of an existing asset which shall be capitalized and depreciated to the extent of its use in accordance with applicable laws for the purpose of determining the amount of taxes that are due.

“Crude Oil” means Petroleum which at the point where it is removed from a Reservoir is not in a gaseous form at 20 degrees Celsius and at atmospheric pressure.

“Data” means any material, samples or information pertaining to Petroleum Activities collected or obtained by any means and in any form that may be recorded, stored, transferred or processed.

“Decommissioning Fund” means an account established by the Right Holder to cover the cost of planning, preparation and implementation of a plan for cessation of Petroleum Activities and decommissioning of Facilities.

“Development and Production Area” means the acreage covering one or more Reservoir identified for Development and Production as stipulated in the plan for Development and Production that has been approved by the Council of Ministers.

“Disposable Petroleum” means the balance of Petroleum extracted which is not reinjected and thus remaining and set aside to determine the Right Holders entitlements to Cost Petroleum and Profit Petroleum after deduction of Petroleum allocated to satisfying the Right Holders obligations to pay the Royalty or deliver it in kind to the State and that portion of Petroleum that has been consumed, burned or in any way released or lost between the point of extraction and the point where aforesaid portion of Cost Petroleum or Profit Petroleum may be taken.

“Exploration Costs” means those Recoverable Costs that are attributable to the Rights Holder’s activities undertaken in relation to a geographical area pursuant to a Reconnaissance licence subsequently subject to an Exploration and Production Agreement or to an Exploration Agreement performed in relation to a geographical area already subject to an Exploration and Production Agreement to which the Exploration performed is relevant.

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“Processing” means Petroleum Activities involved in the separation and treatment of Petroleum extracted from a Reservoir up to such point where the Petroleum becomes marketable, but excludes conversion or destructive distillation.

“Quarter” means a period of three calendar months starting January 1st, April 1st, June 1st or October 1st respectively.

“Recoverable Costs” means all those costs which to the extent permitted by Offshore Petroleum Resource Law and the Exploration and Production Agreement, are incurred by the Right Holder in carrying out Petroleum Activities in which the Right Holder participates pursuant to an Exploration and Production Agreement.

“Ultimate Parent Company” means in relation to a group of Affiliated Companies, the company within such group that is not subject to Control by any other company.

“The Minister” means the Minister of Energy and Water.

Article 2. The Regulations Subject Matter and Geographical Scope:

These regulations apply to Petroleum Activities and shall have the same geographical and subject matter scope as defined by the Offshore Petroleum Resources Law.

Article 3. Other Applicable Laws and Regulations:

Lebanese laws, including provisions relating to Petroleum Rights, and consents or approvals required according to such legislation, shall be applicable to Petroleum Activities.

Article 4. Configuration of Areas for Awarding Petroleum Rights:

The areas available for the purpose of awarding Petroleum Rights to conduct Petroleum Activities are divided into blocks delimited by coordinates and points according to meridians and parallels, unless boundaries with other nation states or other circumstances warrant otherwise.

Article 5. Conduct of Petroleum Activities:

Any legal person conducting Petroleum Activities or involved in related activities shall perform the following activities:

- a) in accordance with applicable laws, Petroleum Rights, and decisions and directions by the competent authorities;
- b) prudently, diligently and with due regard to optimal recovery of Petroleum;
- c) with particular regard and in accordance with environmental and safety standards, and when applicable also those standards generally accepted in the international Petroleum industry applicable from time to time in similar circumstances; and
- d) in compliance with any Government approved plans for the Petroleum Activities.

Article 6. Directions from Public Authorities:

Vessels and crafts used for or involved in Petroleum Activities shall comply with applicable international and Lebanese laws and regulations regarding Petroleum Activities and navigation. The vessels and crafts shall abide by instructions given by the competent Lebanese authorities and by the competent Lebanese naval vessels, patrol boats or crafts.

Article 7. Legal Representatives of the Right Holder:

An applicant to a Petroleum Right shall have an appointed legal representative who shall reside in the Republic of Lebanon or such other place as approved by the Minister following the consultation of the Petroleum Administration.

A Petroleum Right may only be awarded to a legal person incorporated, registered and headquartered in a jurisdiction fully transparent to Lebanese authorities. The same requirement applies also to an Affiliated Company of the Right Holder awarded an exclusive Petroleum Right.

A Right Holder who is not Lebanese and resident in Lebanon shall establish and maintain a legal presence in Lebanon for the purpose of fulfilling the Right Holder's obligations pursuant to applicable Lebanese law related to the awarded Petroleum Right. If a legal person is awarded an exclusive Petroleum Right and the legal person is not Lebanese, then the Right Holder shall for the purpose of such Petroleum Right, at least establish and maintain a branch in Lebanon. A Right Holder to a Petroleum Right that is not exclusive shall at least establish and maintain a legal presence in Lebanon for the purpose of taxation.

A Right Holder shall appoint a general manager and shall notify the Petroleum Administration of the identity of the individual so appointed within thirty days after becoming a Right Holder. If the individual so appointed ceases to be general manager, the Right Holder shall appoint a replacement and inform the Petroleum Administration accordingly.

Article 8. Capacities and Location of Management of the Right Holder:

A Right Holder shall no less than thirty days after the entry into force of a Exploration and Production Agreement or other Petroleum License granting an exclusive Petroleum Right, have immediately initiated and have in place and maintain a legal presence in Lebanon appropriately staffed and authorised to manage all aspects of rights and obligations pursuant to applicable laws related to or arising out of having obtained such Petroleum Right or obligations pursuant to applicable laws, Exploration and Production Agreement or other Petroleum License.

The Petroleum Activities shall be conducted from and supplied from a site located in Lebanon, save for emergency situations and due to a practical impossibility to establish a site in Lebanon during the exploration phase and subject to the Minister's approval in both cases. The Council of Ministers may request the Right Holder and the Operator to use particular bases designated by the Council of Ministers. The Council of Ministers shall motivate its decision if sites designated by the Council of Ministers are different than those proposed by the relevant Right Holder.

Article 9. Management System:

The Right Holder shall ensure that the Operator implements and the Operator shall establish and maintain a management system which:

- a) Ensures the systematic management and implementation of all of the Operator's activities;
- b) Contributes towards the continuous effort in improving conduct and results of Petroleum Activities; and
- c) Provides for comprehensive and coordinated commercial, operational and regulatory supervision of the Petroleum Activities.

The management system shall, inter alia, include the following elements:

- a) Description of the objectives of the Petroleum Activities;
- b) Overview of the relevant rules and regulations that are applicable and a description of the mechanisms for keeping the information updated with regard to amendments or new regulatory requirements;
- c) Specific requirements applicable in respect of safety, working environment, protection of the environment, and resource management that comprise the basis for planning, implementation and updating projects, operations and other Petroleum Activities;
- d) Organisation of the planned activities, including a description of the allocation of duties, responsibilities and authority, the distribution of units and personnel, and the modes of communication;
- e) Description of qualifications required from personnel, personnel shortages and the plans to mitigate such shortages, including the relevant qualifications required from personnel to fill identified gaps;
- f) Guidebook of procedures, instructions, or other routines describing the planning and implementation of activities in order to achieve the proposed objectives;
- g) Procedures or instructions manual describing the handling of situations or incidents in breach of, or deviation from, regulatory or company instituted norms, standards, procedures or other requirements; and
- h) Plans for updating and further development of the management system.

Article 10. General Duties of the Operator and the Right Holder:

The Right Holder shall ensure that the Operator conducts prudent Petroleum Activities, including development, implementation, and updating of policies, strategies, evaluations, plans and technical solutions in order to:

- a) Conduct Petroleum Activities in compliance with the established objectives for safety, working environment, health and protection of the environment;

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- b) Optimise extraction of Petroleum resources whilst ensuring maximum recovery of commercially exploitable Petroleum in each Reservoir or a group of Reservoirs;
- c) Keep consumption of Petroleum for Petroleum Activities to a minimum and systematically reduce consumption;
- d) Use existing and planned Facilities and their capacities to achieve optimal extraction and rational use of Petroleum resources;
- e) Take all practical measures to prevent the prejudicial entry of water or any other incident causing damage to the Petroleum-bearing formation of a Reservoir which may be encountered during any well related activity, including drilling, plugging or abandonment of a well;
- f) Ensure optimal control the flow from the well and of Petroleum throughout Facilities;
- g) Prevent the escape or loss of Petroleum;
- h) Avoid waste of Petroleum and loss of the natural energy in the Reservoir;
- i) Identify and remedy or mitigate existing or potential deviations in relation to approved plans;
- j) Ensure that all personnel engaged in Petroleum Activities are thoroughly familiar with the Facilities, and relevant operational procedures and policies; and
- k) Ensure compliance with regulatory principles and requirements;

The Right Holder shall ensure that the Operator has established and maintains systematic routines to ensure that Operator's personnel, or its contractors, are fully informed of the content of relevant applicable laws and these Regulations.

The responsibility of the Right Holder and the Operator does not, in any way, influence the responsibility of each employer and employee to execute the work in compliance with applicable laws and these Regulations.

Article 11. General Provisions on the Strategic Environmental Assessment Study:

The State shall undertake a strategic environmental assessment study before any Petroleum Rights are awarded or Petroleum Activities are initiated in areas where such rights have not previously been awarded or activities permitted.

The Minister shall, on the basis of the opinion of the Petroleum Administration, initiate and conduct a strategic environmental assessment in accordance with any proposal or proposed amendment of a policy, plan, program, study or investment projects related to Petroleum Activities and that covers the entirety of a Lebanese region or of the petroleum sector.

The purpose of the strategic environmental assessment study is to ensure that such projects comply with the health and public safety conditions and environment protection and sustainability of natural resources.

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The strategic environmental assessment shall comprise the phases provided for in Decree no. 8213 (Strategic Environmental Assessment for Policies, Plans and Programs Projects in the Public Sector), taking into consideration the following additional requirements:

a) Screening of the project: The Minister shall rely on the opinion of the Petroleum Administration during the screening phase.

b) Scope of the strategic environmental assessment study: The Minister shall prepare on the basis of a study by the Petroleum Administration a proposal concerning the determination of the scope of the strategic environmental assessment study and report. The proposed scope must be made available to the public and private entities concerned. Comments in relation to the program shall be submitted within a deadline of not less than four (4) weeks. The Minister shall decide, on the basis of the opinion of the Petroleum Administration, and in coordination with the Ministry of Environment, the final scope of the strategic environmental assessment study on the basis of the proposal and any related comments. The comments that are submitted in relation to the scope of the strategic environmental assessment study and the method of their assessment and their effects on the final scope shall be taken into consideration, and copies of the final scope shall be distributed to those who submitted comments during the consultation operation. The Council of Ministers shall determine the final scope of the strategic environmental assessment study on the basis of the Minister's proposal which in turn shall be based on the opinion of the Petroleum Administration.

Article 12. Content of the Strategic Environmental Assessment Report:

The strategic environmental assessment shall result in a report in line with Schedule no. 3 attached to Decree no. 8213 (Strategic Environmental Assessment for Policies, Plans and Programs Projects in the Public Sector).

If possible, the report resulting from the strategic environmental assessment and the materials forming the basis of such report must be available at the Minister's office in an electronic form.

Chapter 2 Reconnaissance

Article 13. Application and Award of a Reconnaissance License:

A Reconnaissance license is awarded by the Minister based on the opinion of the Petroleum Administration.

The application for a Reconnaissance licence shall be submitted to the Minister with a copy to the Petroleum Administration and one digital copy according to the format specified by the Petroleum Administration.

The application shall be made in Arabic. Supporting documents shall be in Arabic or English.

The application and the supporting documents shall together comprise the following information:

a) Name, address and nationality of the applicant. If the applicant is a foreign company, the identification of the applicant's representative in Lebanon;

b) Identification of the area applied for;

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- c) The purpose and nature of the activities applied for;
- d) The proposed plan for the activities;
- e) The applicant's technical qualifications and experience;
- f) The equipment and vessels or crafts proposed to be used for the activities;
- g) The license period applied for;
- h) Documentation of insurance coverage;
- i) The applicant's management system for the execution of the activities;
- j) Information on the possible impact of the planned activities on the environment and the mitigation measures;
- k) Assessment of the hazards and the health, safety and environmental plan;
- l) Quality plan;
- m) Certificate of payment of the Reconnaissance licence application fee; and
- n) Any other information which may be required by the Petroleum Administration for the purpose of assessing the application.

An application for permission to enter Lebanese internal waters, airspace, harbours or ports must be made to competent authorities pursuant to applicable Lebanese laws governing the entry and transit of non-military vessels or crafts.

Article 14. Conditions of a Reconnaissance Licence:

A Reconnaissance license may be limited to apply to specific types of Reconnaissance activities.

The Minister shall, based on the opinion of the Petroleum Administration, specify the conditions of the Reconnaissance licence which shall at least include:

- a) The duration of the Reconnaissance license;
- b) Management of operations conducted pursuant to the Reconnaissance licence;
- c) The insurance to be established in relation to the activities performed pursuant to the Reconnaissance licence;
- d) The vessels, crafts and equipment used in conducting operations pursuant to the Reconnaissance licence;
- e) The implementation and timing of specific activities;

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f) Terms and conditions under which Right Holder may sell or transfer Data; and

g) Form and content of any notification to the Petroleum Administration related to the sale or transfer of Data, and specific reports or results to be submitted pursuant to the requirements of the Reconnaissance licence.

The Minister may, based on the recommendation of the Petroleum Administration, grant exemptions from the conditions of the Reconnaissance license if special circumstances or substantial resource management reasons warrant such exemptions.

The information resulting from the reconnaissance operations are considered as the property of the Lebanese government pursuant to the Offshore Petroleum Resources Law.

Article 15. Duties in Relation to Reconnaissance:

Activities permitted pursuant to the Reconnaissance license shall be conducted in a prudent manner and according to applicable laws. Operations conducted pursuant to a Reconnaissance licence must not unnecessarily or unreasonably impede or prevent the navigation of other vessels or crafts, fishing, aviation or other lawful activities. Activities pursuant to a Reconnaissance licence must not present a hazard or cause damage to Facilities, or towards pipelines, cables or other subsea structures used for other purposes than Petroleum Activities.

During planning and execution of operations pursuant to a Reconnaissance licence, all reasonable precautions shall be taken to prevent damage to property, marine fauna and flora, archaeological sites and relics. The same applies with regard to preventing pollution and dumping of waste to the sea, the sea bed and its sediments, the atmosphere or land.

Article 16. Rights Pursuant to a Reconnaissance Licence:

The Reconnaissance licence applicant may be granted pursuant to the Reconnaissance licence the right to conduct geological activities and collect Data for the purpose of Petroleum Activities or Discovery of Petroleum, including sampling to a depth not deeper than 50 meters below the seabed. The Reconnaissance license period commences on the date of the award.

Article 17. Fees Relating to Reconnaissance:

An application for any type of Reconnaissance license is subject to a fee of twenty thousand (20.000) United States dollars which shall be paid to the Treasury. If the fee has not been paid, the application shall not be regarded as received.

Article 18. Reconnaissance Plan:

The Reconnaissance licence holder shall submit a Reconnaissance plan to the Minister with a copy to the Petroleum Administration no later than five weeks prior to the planned commencement of activities pursuant to a Reconnaissance licence. The Reconnaissance plan shall be submitted in the format stipulated by the Petroleum Administration.

Article 19. Reconnaissance Reporting:

The Reconnaissance licence holder shall submit a report to the Petroleum Administration every second week during the period of activities pursuant to a Reconnaissance license, starting from the date of commencement of Reconnaissance activities, and in the format specified by the Petroleum Administration.

The Reconnaissance licence holder shall as soon as possible, and no later than three (3) months after the completion of the activities described in the approved Reconnaissance plan, submit a final report to the Petroleum Administration, including all Data related to the Reconnaissance activities. The Petroleum Administration shall stipulate the content and format of such final report.

Any Data that requires Processing or analysis in excess of three months from completion of collection or after acquisition shall be submitted as soon as the Data has been processed or analysed.

In addition to the Data mentioned above, the Reconnaissance licence holder shall submit any other important Data and information related to the Reconnaissance activity required by the Petroleum Administration for resource management purposes in the format decided by the Petroleum Administration.

The Petroleum Administration shall inform the competent governmental entities and the entities affected by such activities about the exact time and place of operations performed pursuant to the Reconnaissance licence, the name and speed of the vessel or craft, as well as the length of any towed equipment, including seismic cables, or size of any placed equipment. If the activity is not commenced at the date stipulated by the Reconnaissance license, the Reconnaissance licence holder shall as soon as possible send a report to the Petroleum Administration and propose a new start-up date for the activity.

The Petroleum Administration may specify the requirements in respect of the identification, quality, properties and format of Data, analysis and reports that are submitted pursuant to applicable laws.

Article 20. Extension of a Reconnaissance License:

The Minister may, based on the recommendation by the Petroleum Administration, extend the Reconnaissance license by a period of up to one year, not to exceed a total period of three years.

The application for an extension of a Reconnaissance licence shall be submitted no later than ten working days prior to the date of expiry of the existing Reconnaissance license.

The application for an extension must include a justification for the extension, an updated Reconnaissance plan and other necessary information.

Article 21. Reconnaissance Conducted Pursuant to Other Petroleum Rights:

The provisions of this chapter relating to Reconnaissance plan, notification, Data, samples analysis and reports shall apply similarly to Reconnaissance conducted under an Exploration and Production Agreement or other Petroleum Rights.

Article 22. Registering a Reconnaissance Licence:

The Reconnaissance licence holder must register every Reconnaissance licence awarded to him as well as its extension and cancellation decision in the Petroleum Register provided for in Article 52 of the Offshore Petroleum Resources.

Chapter 3 Exploration and Production Rights**Article 23. Invitation to a Licensing Round:**

The Minister shall, after consulting the Petroleum Administration, launch invitations for the participation in the licensing rounds.

The invitation to apply for Exploration and Production rights shall, in addition to what is prescribed by law, comprise:

- a) Areas identified by coordinates;
- b) Geosciences and technical Data, and location of Data room;
- c) Method, format and deadline for submitting an application;
- d) Key criteria for awarding an Exploration and Production Agreement;
- e) Terms and conditions, including general and specific terms and conditions, related to the round or the area; and
- f) Model Exploration and Production Agreement, including identified biddable items;
- g) Any other information or documents requested by the Minister.

Article 24. Application Procedures:

The applications for an Exploration and Production right shall be submitted as described in the invitation to the licensing round decree.

The application for an Exploration and Production right, including its supporting documents, shall be submitted to the Minister, with a copy to the Petroleum Administration and one digital copy. The digital copy of the application and supporting documents shall be in the format prescribed by the Petroleum Administration.

The application shall be in Arabic. Supporting documents shall be in Arabic or English.

Article 25. Content of the Application for an Exploration and Production Right:

The application for an Exploration and Production right shall contain the required information and must at least contain the following information and documents:

- a) Name, address, and nationality of the applicant;

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- b) If the applicant is a foreign company, the identification of the applicant's legal representative in Lebanon;
- c) Description of the applicant, place of incorporation and registration of its company, and the identification, domicile and nationality of the applicant's directors; including the identification of and relationship with Affiliated Companies;
- d) Cooperation agreements with other applicants entered into with the view to apply for Exploration and Production rights or conduct Petroleum Activities;
- e) Identification of the block being applied for; and
- f) Any other information requested in the invitation.

The Petroleum Administration may require further information.

Article 26. Application Fee:

The retrieval of an application for an Exploration and Production right is subject to a fee of fifty thousand (50.000) United States dollars, which shall be paid to the Lebanese Treasury.

Article 27. The Exploration and Production Agreement:

The Exploration and Production Agreement shall, in addition to the requirements stipulated by the Offshore Petroleum Resource Law, at least comprise:

- a) The identification of the parties to the Exploration and Production Agreement;
- b) The Petroleum Rights awarded and duration stipulated in the Exploration and Production Agreement;
- c) The specific obligations imposed on or undertaken by the Right Holders in relation to the particular Petroleum Rights obtained;
- d) Regulation of the relationship between the Right Holders to each Exploration and Production Agreement;
- e) Minimum general guarantees;
- f) Minimum participating interest in the EPA to be held by Right Holders and by the Right Holder appointed as Operator;
- g) Processing of confidential information;
- h) Appointment of the Operator;
- i) Plan for the training of national technicians of the institutions involved in the Petroleum Activities;
- j) Dispute resolution mechanism; and

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k) Any other items determined by the Petroleum Administration with the Minister's approval.

The Exploration and Production Agreement shall be executed in Arabic. An unofficial English language version may be drawn up.

The Exploration and Production Agreement shall be governed by and construed in accordance with Lebanese law.

Article 28. Right Holder's Rights to the Awarded Area:

The rights awarded pursuant to an Exploration and Production Agreement includes the right to use of maritime space or the seabed encompassed by the Area stipulated in the Exploration and Production Agreement, for the purpose of conducting Petroleum Activities. For that purpose, the Right Holder may build and operate such Facilities as may be necessary pursuant to such individual licences, permits or consents that are stipulated by applicable laws, the Exploration and Production Agreements or approved plans.

The right to use maritime space or the sea bed for Petroleum Activities shall continue to apply to acreage initially included within the awarded Area, but subsequently relinquished, where such use is necessary for the purpose of conducting Petroleum Activities in the awarded Area remaining under the Exploration and Production Agreement.

The Right Holder shall, for the purposes of Petroleum Activities and subject to other applicable laws and necessary licences, permits, approvals or consents, have the right:

- a) to build and operate Facilities which are required in furtherance of its Petroleum Activities according to the plan for Development and Production or;
- b) to build and operate all communication and Transportation systems and equipment; and
- c) to build and operate harbour and terminal Facilities for use exclusively in Petroleum Activities, together with the necessary means of communication and transport between such Facilities and any part of the awarded Area.

The right to build and operate necessary Facilities outside of safety zones shall not impede any rights of other a legal or physical person legitimate uses of the sea, including when applicable, established rights to fishing or aquaculture not interfering with Petroleum Activities in areas subject to a safety zone for Petroleum Activities.

The Right Holder shall exercise the right to use maritime space and other areas reasonably, and in a manner so that Petroleum Activities pose as few impediments as reasonable possible to the interests of such other users of the same area.

Article 29. Mandatory Work Commitments:

The contents, scope and time limits of the mandatory work commitments shall be defined in the individual Exploration and Production Agreement, and may be divided into specific periods and may consist of obligations to perform within specified time limits:

- a) Reconnaissance;

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b) Exploration; and

c) Various interpretation and analysis of Data, reports or results.

The mandatory work commitments stipulated in the Exploration and Production Agreement shall in all cases be fulfilled within the Exploration phase defined in the Exploration and Production Agreement.

Article 30. Dividing the Exploration Phase:

The Exploration phase may be divided into periods of time related to the work plans submitted by the Right Holder in the Exploration and Production Agreement.

Article 31. The Information Required Upon the Commencement of the Exploration Phase:

The Right Holder, before starting the exploration works, must submit to the Minister, with a copy to the Petroleum Administration, and by way of example only, with no limitation, the following information:

a) The delimitation of the Exploration area;

b) The purpose and nature of the projected activities;

c) The proposed plan for the activities;

d) The Right Holder's technical qualifications and its experience;

e) The equipment, the crafts, the vessels, the proposed drilling platforms to be used for the performance of the activities;

f) The duration of the projected activities;

g) The insurance coverage documents;

h) The management system of the Right Holder to perform the activities;

i) Information regarding the eventual impact of the projected activities on the environment and the mitigation measures;

j) Assessment of the hazards and the health, security and environmental plan;

k) The quality plan; and

l) Any other information that would be requested by the Petroleum Administration.

An application for permission to enter Lebanese internal waters, airspace, harbours or ports must be made to the competent authorities pursuant to the applicable Lebanese laws governing the entry and transit of non-military vessels or crafts.

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The Minister shall approve, on the basis of the opinion of the Petroleum Administration, the commencement of the exploration works after assessing the information submitted.

Article 32. General Provisions Concerning the Extension of the Exploration and Production Agreement:

An application for extension of the Exploration phase or the Production phase stipulated by the Exploration and Production Agreement shall be submitted to the Minister, with a copy to the Petroleum Administration. The application with supporting documents shall be submitted in one original and one digital copy in the format prescribed by the Petroleum Administration. Applications for extension of the Exploration phase or the Production phase stipulated by the Exploration and Production Agreement shall comprise all such relevant information equivalent to information required to obtaining an Exploration and Production Agreement.

An application for extension of the Exploration phase or the Production phase stipulated by of the Exploration and Production Agreement shall include a map indicating the Area, and a list of coordinates, for which an extension is being applied for.

The Petroleum Administration may stipulate conditions related to the content of an application for extension of the Exploration phase or the Production phase stipulated by the Exploration and Production Agreement with the Minister's approval.

Article 33. Extension of the Exploration Phase:

The Council of Ministers may extend the Exploration phase upon a request submitted by the Minister based on the opinion of the Petroleum Administration as stipulated in the Exploration and Production Agreement, within the maximum ten (10) year limit stipulated by law and only for justified operational reasons, or for circumstances beyond the Right Holder's control or for other particular and justified reasons.

An application for extension of the Exploration phase or Production phase stipulated by the Exploration and Production Agreement shall be submitted to the Minister with a copy to the Petroleum Administration no later than three (3) months before the expiry of the Exploration phase unless otherwise decided by the Minister.

The Exploration phase stipulated in the Exploration and Production Agreement may be extended in the following situations:

- a) If, at the end of the Exploration phase, the Right Holder is drilling or testing a well, and applies for an extension of the Exploration phase;
- b) If a Discovery has been made, the Right Holder has fulfilled the mandatory work commitments stipulated by the Exploration and Production Agreement and the Right Holder undertakes the commitment to complete an appraisal program satisfactory to the Petroleum Administration for the commercial assessment of the Discovery.

In such cases, the areas which are the subject of the application for extension shall encompass the area related to the exploration under case (a) above and the proposed area of discovery under case (b) above.

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If a plan for Development and Production is submitted before the Exploration phase stipulated by the Offshore Petroleum Resources Law and the Exploration and Production Agreement expires, the Right Holder retains the rights over the Area stipulated by the aforementioned law and the Exploration and Production Agreement until the plan for Development and Production is approved.

Article 34. Extension of the Production Phase:

The Council of Ministers may extend the Production phase upon an application for extension submitted by the Minister based on the opinion of the Petroleum Administration as stipulated in the Exploration and Production Agreement within the maximum time limit of thirty (30) years provided for by law and only for justified operational reasons, or for circumstances beyond the Right Holder's control or for other particular and justified reasons.

The application to extend the Production phase stipulated in the Exploration and Production Agreement is submitted to the Minister with a copy to the Petroleum Administration no later than five (5) years before the expiry of the Production phase stipulated in the Exploration and Production Agreement, unless otherwise decided by the Minister.

Article 35. Notification and Assessment of a Discovery:

The operator acting on behalf of the Right Holder, within six (6) months as of the examination of the discovery well, must submit a report to the Minister with a copy to the Petroleum Administration, comprising detailed information regarding the discovery, including the preliminary estimates of the existing oil and the quantities that can be recovered in accordance with the substances classification system adopted by the Petroleum Administration and the industrial standards and the classification standards used by the Petroleum Engineers Association.

The operator must submit to the Petroleum Administration an assessment program for the discovery and that comprises seismic surveys or drilling activities, and must implement such program with care.

The operator must submit to the Petroleum Administration within three months as of the end of the assessment program, a detailed assessment report comprising the results of the performed petroleum activities and their assessment.

Article 36. Voluntary Relinquishment of Acreage:

The Right Holder may by notification to the Petroleum Administration, no later than three months before year end, relinquish part of the acreage awarded to it pursuant to the Exploration and Production Agreement.

A notice of relinquishment of parts of the Exploration and Production Agreement acreage shall include a map indicating the parts to be relinquished with a reference to the coordinates.

The Minister, based on the opinion of the Petroleum Administration, may require the performance of the obligations stipulated in the Exploration and Production Agreement and the other conditions on the basis of which the Exploration and Production Agreement has been awarded shall be fulfilled prior to a total relinquishment or surrender.

The Right Holder shall submit to the Petroleum Administration all documents and Data pertaining to a surrendered Exploration and Production Agreement or the relinquished acreage.

Article 37. Mandatory Relinquishment of Acreage:

If the Exploration phase is extended, the Right Holder shall at least:

- a) Upon the commencement of the extended Exploration phase, relinquish not less than fifty (50) percent of the acreage awarded under the Exploration and Production Agreement; and
- b) At the end of the Exploration phase, or the extended Exploration phase if applicable, relinquish all the acreage not comprised by a Development and Production Area.

Any acreage relinquished shall be contiguous and delimited by meridians and parallels of latitude expressed in a minutes of a degree. This applies similarly to any retained Exploration and Production Agreement Area.

The Minister, based on the recommendation by the Petroleum Administration, shall approve the shape and size of the retained Area.

The Minister may, based on the recommendations of the Petroleum Administration, propose to the Council of Ministers, when particular reasons so warrant, to take the appropriate decisions to approve the partitioning of the Exploration and Production Agreement Area.

Article 38. Obligations in Relation to Relinquishment of Acreage or Expiry of Use:

In case an Exploration and Production Agreement is revoked the assets and rights obtained or integrated in such Exploration and Production Agreement shall without compensation to the Right Holder revert to the State.

In the case of relinquishment of acreage or surrender, revocation or when an Exploration and Production Agreement expires, the acreage awarded by the Exploration and Production Agreement shall without compensation revert to the State, and may be relicensed and awarded in future licensing rounds.

In the case of relinquishment of acreage or surrender, revocation or when an Exploration and Production Agreement expires without any Facilities being developed or used, then no plan for cessation of Petroleum Activities and decommissioning shall be required, but the Right Holder shall within ninety (90) days:

- a) Plug or close off, in a manner consistent with applicable laws and, when applicable, good Petroleum industry practice, all wells related to the Petroleum Activities in the Exploration and Production Agreement Area unless otherwise approved by the Minister; and
- b) Take all actions necessary, in accordance with applicable laws and, when applicable, good Petroleum industry practice, to prevent hazards to human life, the property of others, or the environment resulting from conditions in the awarded Area, or caused by Petroleum Activities, being conditions which were or ought with reasonable diligence to have been evident at the time of relinquishment or termination.

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Article 39. Surrender of Rights Pursuant to an Exploration and Production Agreement:

The Right Holder may by giving the Minister not less than thirty (30) days notice, with a copy to the Petroleum Administration, surrender in favour of the government all or part of the rights under an Exploration and Production Agreement, only as follows:

- a) After all the Right Holder's obligations in respect of any Exploration phase have been fulfilled, in particular those provided for in Article 25 of the Offshore Petroleum Resources Law , the Right Holder may at any time thereafter surrender its rights in respect of the entire awarded Area provided that no new obligations will thereafter accrue; and
- b) At any time after all the Right Holder's obligations in respect of any Exploration phase have been fulfilled, surrender its rights in respect of any acreage forming part of the awarded Area provided that no new obligations will thereafter accrue in respect of such acreage; provided that:
 - i. no surrender by the Right Holder of his rights over any part of an awarded Area shall relieve the Right Holder of any of his work commitment obligations stipulated in the relevant Exploration and Production Agreement; and
 - ii. any acreage surrendered shall be continuously delineated by meridians and parallels of latitude expressed in half a minute of a degree.

Chapter 4 Petroleum Production and Transportation

Article 40. Discovery Assessment:

The Right Holder shall undertake the technical and commercial assessment necessary to conclude whether a Discovery may be commercially developed individually or jointly with other Reservoirs within the Exploration and Production Agreement Area.

The notification pursuant to the Offshore Petroleum Resource Law shall encompass an assessment of whether the Reservoirs comprised by the Discovery may be commercially developed individually or jointly with other Reservoirs within the Exploration and Production Agreement Area, and such notice shall include a complete description of the relevant Data, surveys and evaluations which led to such conclusions.

Should the Right Holder consider the Reservoirs comprised by the Discovery unsuitable for a practicable commercial Development and Production, the notification shall address the necessary measures to render their Development and Production commercially practicable, and propose additional tasks for the assessment of the commerciality of said Reservoirs.

Article 41. General Provisions Regarding the Plan for Development and Production:

The Right Holder shall prepare a plan for Development and Production outlining the Development and Production solutions of the respective Reservoir, and the Facilities to be constructed or used, and the off-take of Petroleum sought, as well as a report on the conducted environmental impact assessment study. The report resulting from the environmental impact assessment study shall be submitted to the Minister no later than at the time of submission of the project part of the plan for Development and Production.

The plan shall be submitted to the Minister with a copy to the Petroleum Administration ninety (90) days before the end of the Exploration phase.

A digital copy of the plan for Development and Production and its supporting documentation shall accompany the application. A digital copy of the application shall also simultaneously be submitted to the Petroleum Administration. The digital copy shall be submitted in the format decided by the Petroleum Administration.

The plan for Development and Production, and its subsequent implementation, shall be based on the rational use of the Petroleum reserves and existing Facilities shall be used when possible from a technical, economic, safety, environmental and resource management point of view.

In order to ensure that the interests of the State as resource owner and the Right Holder's objectives are compatible, the Petroleum Administration shall during preparations be consulted on the scope and content of the plan for Development and Production.

The Minister, based on the opinion of the Petroleum Administration, shall have the authority to:

- a) Approve the program for the environmental impact assessment proposed by the Right Holder;
- b) Verify that the environmental impact assessment and the report resulting therefrom, comply with the approved program and applicable laws requirements; and
- c) Submit a proposal for the Council of Ministers' approval of a plan for Development and Production including relevant terms and conditions.
- d) Determine the shape, size and delineation of the Development and Production Area.

In case the plan for Development and Production includes the requirement for a Transportation or storage Facility, the requirements to a plan for Development and operation of a Transportation or storage Facility shall also be applicable.

The findings of the report resulting from the environmental impact assessment and the comments resulting from consultations shall be used to stipulate the Minister's proposed conditions for the approval of the plan for Development and Production.

The Petroleum Administration shall study the Production and Development plan submitted by the Right Holder and submit it to the Minister. If the Exploration phase ends before a decision is taken in relation to the proposed Development and Production plan, the Right Holder shall benefit from an extension of the exploration phase until a decision with respect to the plan is issued.

If commercial Production of a Reservoir has not commenced within a period specified in the approved plan for Development and Production, from the date on which the plan for Development and Production was approved, then the rights of the Right Holder pursuant to Offshore Petroleum Resources Law and the Exploration and Production Agreements in relation to the approved Development and Production Area shall be extinguished as if the rights had been surrendered pursuant to the Offshore Petroleum Resources Law.

Article 42. Content of the Project Plan for Development and Production:

The project part of the plan for Development and Production shall, in addition to the requirements stipulated by the Offshore Petroleum Resource Law, contain the following information:

- a) Description of the strategy and Development model, including:
 - i. criteria for choices made;
 - ii. description of subsequent Development stages;
 - iii. tie-ins with other fields; and
 - iv. if necessary: coordination with other Petroleum Activities.

- b) Description of geological and Reservoir engineering aspects with particular references to analyses and evaluations of geological, Reservoir engineering and Production engineering elements, and considerations forming the basis of the selection of the Production system;

- c) Proposed delineation of the Development and Production Area encompassing the acreage covering the Reservoir or Reservoirs in respect of which a statement of Production commencement has been given;

- d) Description of eventual additional planned Exploration activities;

- e) Projected Production schedule, including studies on the regularity of Production and Transportation, including an evaluation of impact of connection to existing or planned Facilities and fields;

- f) Status of other permits, including permits and authorization to conduct Petroleum Activities in compliance with other laws in force;

- g) Technical description of the forecasted Facilities for use on site including:
 - i. Number of wells;
 - ii. Equipment for Production;
 - iii. The use of produced Petroleum as fuel in the Petroleum Activities;
 - iv. Injection of any component such as Petroleum, gases, liquids, including water, or chemicals, and solids;
 - v. Measurement and storage;
 - vi. Pipelines, inclusive of the off-take Transportation system for buyers of Crude Oil or other Petroleum; and
 - vii. Storage and loading Facilities.

- h) Description of technical solutions, including solutions aimed at preventing and minimizing the flaring or venting of Petroleum or pressure and environmentally harmful discharges and emissions;

- i) List of quality standards which will be implemented;

- j) Information on management systems, including, information on the planning, organization and implementation of the Development;

- k) Information on operation and maintenance;

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- l) Description of the overall safety objectives and the fundamental safety and working environment assessments which form the basis for a certain Development model, including a description of the technical measures for emergency purposes;
- m) The proposed implementation of mitigating measures required by the findings following from the environmental impact assessment study;
- n) Summary of the main implementation, operating and maintenance policies and procedures which will be implemented;
- o) The economic evaluations and analyses which have been decisive for the choice of the Development model, and estimates of capital costs, operating and decommissioning costs, description of how the project will be funded and proposed point of delivery for purposes of Petroleum extracted from each Development and Production Area;
- p) Information on the cessation of activities and decommissioning of the Facilities, including the proposed measures to ensure its financing;
- q) Information on how the Petroleum shall be marketed;
- r) Program for the implementation of the plan for Development and Production;
- s) Information regarding other resource management issues that the Petroleum Administration deems necessary.

Article 43. General Provisions on Environmental Impact Assessment Study:

The operator shall undertake an environmental impact assessment study for the proposed Development and Production plan.

The phases of the environmental impact assessment shall comprise the phases provided for in Decree no. 8633 (Environment Impact Assessment Rules) as follows:

- a) Application rules;
- b) Screening of the project;
- c) Determining the scope of the environmental impact;
- d) Preparing the environmental impact assessment report;
- e) Reviewing the environmental impact assessment report;
- f) The position of the Ministry of Environment *vis-à-vis* the environmental impact assessment report; and
- g) The environmental management of the project and the subsequent monitoring.

An environmental impact assessment study shall not be required for activities pursuant to a Reconnaissance license that, when due to their nature, do not cause specific negative impacts on existing Facilities or infrastructure, the environment, public health, security and the economy in general.

Article 44. Environmental Impact Assessment Study for Development and Production:

The environmental impact assessment study shall be conducted within the approved scope, and shall take into consideration findings from relevant environmental impact assessment studies previously conducted.

In areas where more than one Development and Production project is planned, the relevant Right Holders may jointly conduct an environmental impact assessment study comprising more than one Development and Production project. The Minister may require Right Holders to cooperate in the preparation of a joint environmental impact assessment study covering more than one Development and Production project.

In relation to Development and Production for which an environmental impact assessment study is also required under other applicable legislations, a single environmental impact assessment study may be conducted.

The environmental impact assessment study for Development and Production shall cover all areas which may be affected by the Development or Production of all Reservoirs to be included in the plan for Development and Production.

The environmental impact assessment study shall as a minimum comprise the information set out in Schedule no. 8 attached to Decree no. 8633 Environmental Impact Assessment Rules

Article 45. Information Regarding the Environmental Impact Assessment Affecting Other Jurisdictions:

The Minister may instruct the Right Holder to prepare the relevant program for, and the report resulting from, the environmental impact assessment study in such foreign languages as required.

The Minister shall, upon approval of the proposed Petroleum Activities, inform the appropriate representative in jurisdictions which may be affected of the decision, and give account of what measures have been taken to address the significant environmental effects beyond the Lebanese jurisdiction.

Article 46. Production Permit:

The Production of Petroleum, except Petroleum from a Production test of a Reservoir, shall not be carried out unless a Production permit is awarded by the Minister based on the opinion of the Petroleum Administration.

No later than eight (8) weeks prior to the planned commencement of Petroleum Production, the Right Holder shall submit an application for a Production permit with supporting documentation to the Minister, with a copy to the Petroleum Administration. A digital copy of the application and supporting documents shall be submitted simultaneously in the format decided by the Petroleum Administration. Subsequent applications for a Production permit shall be submitted to the Minister,

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with a copy to the Petroleum Administration, no later than six (6) weeks prior to the expiry of the existing Production permit.

The application for Production permit shall have the content and be submitted in the format prescribed by the Minister, on the basis of the opinion of the Petroleum Administration. The application shall at least consist of the following:

- a) The Production schedule for each Reservoir and Exploration and Production Agreement Area;
- b) The monthly and annual Production reports of the previous year;
- c) Historical and updated Reservoir monitoring Data, analysis and other related Data with comments on deviations on earlier forecasts;
- d) Estimated monthly Production volumes of the Reservoirs and Exploration and Production Agreement Area, and for the period applied for;
- e) Estimated total Production volumes for each Reservoir and Exploration and Production Area, and the period applied for; and
- f) Estimated volumes requested to be flared, ventilated or injected volumes during the period applied for.

The Production permit is granted for one year that can be renewed annually. The Minister, based on the recommendation of the Petroleum Administration, may decide that individual permits shall have a different duration based on the size of the Reservoir, type of Petroleum, its rate of Production or other factors of importance for the optimal depletion of Petroleum.

The Production permit shall identify the quantity of Petroleum which may be extracted and consumed, injected, flared or vented, and be based on the Production schedule on which the plan for Development and Production is based.

The Minister, based on the opinion of the Petroleum Administration, may decide that a Production permit shall be stipulated for each individual well, Reservoir or field.

Article 47. Test Production:

An application accompanied by relevant supporting documentation for test Production shall be submitted to the Minister with a copy simultaneously submitted to the Petroleum Administration. A digital copy of the application and its supporting documentation shall accompany the application and the certified copy. The digital copy shall be submitted in the format decided by the Petroleum Administration.

Test Production is understood as the extraction of Petroleum from a Reservoir for the purpose of verifying the Production features of a Reservoir, or to try out or test Development or Production concepts.

The format and content of the application for test Production shall be stipulated by the Petroleum Administration and shall at least consist of the following elements:

- a) Description of the purpose of the test Production;
- b) Description of geological and Reservoir engineering aspects;
- c) A plan and a program for test Production;
- d) Description of the Facilities which will be used, their capacities and capabilities;
- e) Description of systems and equipment for metering Petroleum;
- f) A detailed and itemized budget;
- g) Description of prerequisite special safety and environmental protection systems planned or implemented; and
- h) Unless clearly not required due to existing studies or for other special reasons as approved by the Minister, a summary environmental impact assessment study.

Test Production shall be subject to a permit stipulating procedure, volumes, and including when required in case of necessity, flaring or venting.

Petroleum produced during test Production shall, unless specified in the approval of the plan and program for test Production, be treated according to the Offshore Petroleum Resources Law and shall be stored for subsequent utilization or sale.

Test Production may not exceed six (6) months unless special justified circumstances warrant a longer test Production period.

The approval of the test Production plan may be subject to conditions with regard to duration, methods or Facilities, flaring and sale of Petroleum as well as particular measures related to health, safety, working environment and the protection of the environment, including mitigating or remedial measures to be taken.

Article 48. Conservation of Resources, Flaring and Venting of Petroleum:

Reservoir pressure, flaring, venting and Petroleum used for fuel or other purposes during Production or Transportation, shall be strictly controlled and registered for the purpose of keeping Petroleum Activities energy efficient.

Flaring or venting of extracted Petroleum components shall be subject to a permit awarded by the Minister. Flaring or venting of extracted Petroleum components due to an emergency shall not require approval, but shall be registered and reported to the Minister within twenty four (24) hours from their occurrence.

Article 49. Monitoring of Reservoir Performance:

The Operator shall regularly monitor the Reservoir performance during Production in order to ensure a best possible recovery of Petroleum.

In each distinct zone of each well, including injection wells and other indicators, the Operator shall, to the extent possible, measure on a regular basis or determine among other things, the pressure and flow conditions, the quality of Crude Oil, other Petroleum and water extracted, as well as the location of the contact zones between Crude Oil, other Petroleum and water.

Documentation on Reservoir monitoring shall be submitted to the Petroleum Administration.

Article 50. Documentation and Reports from Production Activities:

Upon commencement of Production, following approval and implementation of a plan for Development and Production, the Right Holder shall prepare and submit Production reports.

Crude Oil shall be measured in Barrels and metric tonnes. Other Petroleum than Crude Oil, shall be measured in cubic meters, metric tonnes and calorific value.

The following information regarding the Production in the previous 24 hours shall be reported to, or made directly available to the Petroleum Administration on a daily basis, by the methods and in the format decided by the Petroleum Administration:

- a) The total produced quantity per well or well path and Facility;
- b) Allocated, value adjusted, marketable Petroleum products produced per Facility or Exploration and Production Agreement Area, including:
 - i. The quantity and quality characteristics of Crude Oil produced;
 - ii. The quantity and quality characteristics of other Petroleum than Crude Oil produced;
 - iii. The quantities of Petroleum re-injected into the Reservoirs; and
- c) In respect of the Exploration and Production Agreement Area as a whole, the quantities of Petroleum transferred at the field export point;
- d) Sales of Crude Oil, per cargo;
- e) Sales of other Petroleum such as natural gas, natural liquid gas and condensate when gaseous, and per owner and buyer.

The following information regarding the Production in the previous month shall be reported to or made directly available to the Petroleum Administration on a monthly basis, by the methods and in the format decided by the Petroleum Administration:

- a) An aggregate of the information provided in the daily Production reports;
- b) Import and export per Facility;

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- c) The total consumption of Petroleum per Facility;
- d) The quantities of Petroleum or pressure discharged, flared or vented;
- e) The quantities of Petroleum re-injected into the Reservoirs;
- f) The size of Petroleum stocks held at the beginning of the month in question;
- g) The size of Petroleum stocks held at the end of the month in question;
- h) Production forecasts for the coming month.

Upon commencement of Production, an annual Production report for each Reservoir and Exploration and Production Agreement Area shall be submitted to the Minister and the Petroleum Administration by 1 February of the following year. The annual Production report shall include an aggregate of the monthly Production reports and provide information regarding other relevant matters relating to Production from each field within the Exploration and Production Agreement Area, including measures taken during the preceding period, and measures planned to be carried out in the coming year. The following main issues shall be covered in the report:

- a) A general Exploration and Production Agreement Area status, including estimation of Petroleum reserves;
- b) An activity report;
- c) Descriptions of plans for the period ahead.

Article 51. Application for a Facility License:

An application for a license for the construction, placement and operation of Transportation or Storage Facilities and a digital copy of the application and its supporting documentation shall be submitted to the Minister, with a copy to the Petroleum Administration.

The construction, placement and operation of a Facility for the transit of Petroleum, meaning a Facility which is not used in connection with Production or Transportation of Petroleum from Reservoirs that are subject to Lebanese jurisdiction, or which is not connected to such Facilities or placed on the Lebanese territory, shall be subject to a Facility license pursuant to these Regulations as applicable in accordance with public international law.

A copy of the application and a digital copy of the application and its supporting documentation shall simultaneously be submitted to the Petroleum Administration. The digital copy of the application and the supporting documentation shall be submitted in the format prescribed by the Petroleum Administration.

The application shall be in Arabic. Supporting documents shall be in Arabic or English.

An application for a license for the construction, placement and operation of Transportation or storage Facilities shall, *inter alia*, contain the following information:

- a) Name, address and nationality of the applicant;

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- b) If an applicant is a foreign entity, the identification of the applicant's legal representative in Lebanon;
- c) Description of the applicant, place of incorporation and registration of its company, and the identification, domicile and nationality of the applicant's directors; including the identification of and relationship with Affiliated Companies;
- d) The applicant's experience in the Petroleum industry, especially regarding Petroleum Transportation in similar circumstances to those in which the applicant seeks to operate;
- e) Information on the applicant's financial capacity, capability and status, the value of its share capital, shareholder structure, its last three annual financial statements and accounts and those of its Ultimate Parent Company, if applicable, and other relevant information to document the financial strength of the applicant;
- f) Description of the organization and technical resources which the applicant(s) will have available in Lebanon, as well as in any other location, for carrying out the activities in the areas which are covered by the application;
- g) Proposed plan for construction, placement and operation of a Transportation or storage Facility;
- h) Proposed agreements on financing, ownership, management and use of the Facilities, terms and conditions for Transportation and third party access and other relevant negotiable items of the license being applied for;
- i) Economic assessment; and
- j) Proposal for appointment of an Operator.

When the application is submitted on behalf of more than one applicant, the requirements listed in subparagraphs (a) through (e) above shall apply to each applicant.

The Minister may require further information.

Article 52. Content of the Facility License:

A license for the construction, placement and operation of Transportation or storage Facilities shall, *inter alia*, comprise at least:

- a) Identification of the Right Holders;
- b) Nature and conditions of the association, whenever the Right Holder is an association of legal entities;
- c) The rights to construct, lay and operate a Facility and corresponding Facilities awarded;
- d) Specification of the designated Facilities;

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- e) Third party access to the Facilities, inter alia;
 - i. Allocation of production capacity and priority of use;
 - ii. Terms and conditions for the preservation of the production capacity and use; and
 - iii. Tie-ins
- f) State's participation;
- g) The handling of issues concerning use and exploitation of land, if any;
- h) The plan for the training of national technicians of institutions involved in the Petroleum Activities; and
- i) Resolution of disputes.

Article 53. General Provisions Regarding a Plan for Construction, Placement and Operation of a Transportation or Storage Facilities:

For the purposes of its approval by the Council of Ministers, an application for a license for the construction, placement and operation of a Transportation or storage Facility shall be supplemented by a corresponding plan for construction, placement and operation of a Transportation or storage Facility.

A plan for the construction, placement and operation of a Transportation or storage Facility and its implementation shall be based on the prudent use of Petroleum resources and existing Facilities.

In order to ensure that the plan for construction, placement and operation of a Transportation or storage Facility is carried out in line with its objectives and fulfils the needs of interested parties, the Petroleum Administration shall during preparations be consulted on the scope and content of the plan.

Article 54. Content of the Plan for Construction, Placement and Operation of Transportation or Storage Facilities:

The Right Holder shall prepare a plan for the construction, placement and operation of Transportation or storage Facilities, including a report of the conducted environmental impact assessment study. The report resulting from the environmental impact assessment study shall be submitted no later than at the time of submission of the project part of the plan for Development and Production.

The project part of the plan for construction, placement and operation shall contain the following information:

- a) Description of the Facilities, Reservoirs or Exploration and Production Areas that the project is planned to provide for Transportation or storage, including analysis and calculations of the Production and engineering features which comprise the basis of the plan for the Development and operation of the Transportation or storage Facility;
- b) Estimated volumes expected to be transported, studies on the regularity of Production and Transportation, evaluation of the impact of connections with existing or projected Transportation or storage Facilities;

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- c) Status of permits for land use and exploitation and authorization to conduct Petroleum Activities onshore or offshore in compliance with laws in force;
- d) Technical description of Facilities and equipment planned to be integrated, including an outline of the Transportation route, as well as details of the storage Facilities;
- e) List of quality standards which will be implemented;
- f) Information on management systems, including information on planning, organization and Development implementation;
- g) Description of how existing Facilities, appurtenant equipment and other infrastructure will be used;
- h) Description of the procedures planned to be used to reach the predefined objectives, including tariffs for Transportation of Petroleum belonging to third parties;
- i) Description of safety objectives and risk evaluations which justify the selection of the specific Development concept;
- j) A description of technical solutions, including solutions to prevent and minimize environmentally harmful discharges and emissions, and technical measures for emergency preparedness;
- k) Summary of the main implementation, operation and maintenance policies and procedures which shall be implemented;
- l) Information on the project organisation, including:
 - i. evaluations and analyses being decisive for the selection of the preferred Development concept;
 - ii. estimates of capital costs, operating cost and decommissioning costs; and
 - iii. description of how the project will be funded.
- m) Outline of the activities required for the decommissioning of the Facilities and the proposed measures to provide for its financing;
- n) Information regarding the ownership of the Transportation or storage Facility;
- o) Schedule for the Development implementation; and
- p) Information regarding other resource management issues that the Petroleum Administration deems necessary;

Article 55. Environmental Impact Assessment Study for Transportation or Storage:

The provisions of Article 44 of this Decree, and the provisions of Decree no. 8633 (Environmental Impact Assessment Rules) shall apply to prepare the environmental impact assessment study for the construction, placement and operation of a Transportation or storage Facility.

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Article 56. Third Party Use of a Facility:

The Minister, based on the opinion of the Petroleum Administration, may decide that a Right Holder that does not own or have the right to use a Facility or a system of Facilities with its appurtenant equipment shall have the right to use spare capacity of such Facilities and necessary appurtenant equipment.

Third party use of spare capacity of a Facility or system of Facilities as described in the first paragraph may only be granted when such third party use does not materially negatively affect the Petroleum Activities of the Right Holder owning or having the right of use of the Facilities in question. Third party desired use of spare capacity shall only be permitted when it is feasible from a technical, environmental and safety point of view provided that:

- a) There is available capacity in the Facility or system of Facilities; and
- b) There are not insuperable technical problems which exclude the proper use of the Facility or system of Facilities to satisfy third parties' requests.

Terms and conditions for the use of a Facility or system of Facilities, preservation or increase of capacity, or Transportation or storage of third party Petroleum shall be negotiated on the basis of applicable regulatory requirements and reasonable commercial terms. Negotiations shall be conducted in good faith.

In order to assist in the negotiations of reasonable commercial terms compliant with applicable regulatory requirements, the Operator shall, without undue delay, make available to interested third parties, on a non-discriminatory basis, relevant information, including technical requirements and future available capacity for the respective Facility or system of Facilities. Disclosure of such information shall be in order to assist in the negotiations of reasonable commercial terms.

The terms and conditions for third party use of a Facility and its appurtenant equipment shall be approved by the Minister based on the recommendation by the Petroleum Administration. Such terms and conditions shall include a tariff that shall represent the payment for the additional investments required for enabling third party use, operational costs and a calculated profit element reflecting the risk taken by the owner of the Facility.

Article 57. Increase in the Production Capacity of Facilities:

If the available production capacity in a Facility or system of Facilities for Transportation is not sufficient to satisfy third parties' requests, the Minister may decide that the Right Holder shall increase the capacity of the Facility or system of Facilities in order to satisfy, on reasonable commercial terms, the request of third parties, provided that:

- a) such increase is possible and does not cause an adverse effect on the technical integrity and safe operation of the Facility or system of Facilities, and
- b) the third parties have assured sufficient funds to support the cost of the requested increase in capacity.

The Minister, based on the opinion of the Petroleum Administration, may waive obligations imposed on the owner or the Right Holder regarding the use of the Facility or system of Facilities if the owner or Right Holder submits documents showing that it has exerted reasonable efforts to satisfy the request of the third party and that it is not possible to comply with the request for reasons of safety and cost.

Article 58. Third Party Access - Dispute Resolution:

If the parties cannot reach an agreement with regard to the commercial and operational terms for the use of a Facility or a system of Facilities for the purpose of Petroleum Activities, the matter may be settled by an independent commission of three experts selected by the Petroleum Administration and in accordance with the procedure included in the relevant Exploration and Production Agreement or other Petroleum Right document issued pursuant to the Offshore Petroleum Resources Law.

Chapter 5 Cessation of Petroleum Activities and Decommissioning of Facilities

Article 59. General Provisions Relating to Cessation of Petroleum Activities and Decommissioning of Facilities:

The Right Holder shall prepare a plan for the cessation of Petroleum Activities and the decommissioning of Facilities, including a report of the conducted environmental impact assessment study. The plan shall be submitted to the Minister for approval, with a copy to the Petroleum Administration.

The report resulting from the environmental impact assessment study shall be submitted no later than the time of submission of the disposal plan for cessation of Petroleum Activities and decommissioning of Facilities.

A digital copy of the plan for cessation of Petroleum Activities and decommissioning of Facilities shall simultaneously be submitted in the format prescribed by the Petroleum Administration. The Minister shall be notified of any changes in the factual information after such plan has been submitted.

The plan shall be prepared in consultation with the Petroleum Administration and in compliance with the Offshore Petroleum Resources Law. The plan shall ensure that cessation and decommissioning is conducted in a manner which, when applicable, will give effect to standards and procedures generally recognised as prudent in the international Petroleum industry and the Right Holders' standards for cessation and decommissioning.

In the event that a Right Holder does not submit a plan for cessation of Petroleum Activities and decommissioning of Facilities to the Minister within the prescribed time, the Minister may serve upon the Right Holder a notice requiring the Right Holder to submit such plan to the Minister within a period of ninety (90) days from date on which the notice was served. If within that period no plan for cessation of Petroleum Activities and decommissioning of Facilities is submitted, the Minister, based on the opinion of the Petroleum Administration, may commission consultants of international standing to prepare such plan. The cost of commissioning consultants to prepare a consultant's plan shall be payable by the Right Holder to the Government.

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A plan for cessation of Petroleum Activities and decommissioning of Facilities prepared by a consultant shall be implemented by the Right Holder in accordance with its terms as though it was an obligation of the Right Holder in accordance with the Offshore Petroleum Resources Law no. 132 dated 24/8/2010 and the Exploration and Production Agreement.

Article 60: Content of the Plan for Cessation of Petroleum Activities and Decommissioning of Facilities:

The plan for the cessation of Petroleum Activities and decommissioning of Facilities shall consist of a disposal part evaluating the alternative solutions for continued Production or cessation of Petroleum Activities and decommissioning of Facilities, and a part consisting of an environmental impact assessment report.

The disposal part of the plan is the operational and resource management part of the plan, which shall comprise a detailed description in respect of each Development and Production Area with regard to:

- a) Development and Production Area and Facilities history;
- b) Reservoirs and Production history;
- c) Tail-end Production schedules and economic threshold for termination of Production and Petroleum Activities;
- d) Alternatives for continued Production or production activities;
- e) Further use of the Facilities;
- f) Relevant Reservoir related Data;
- g) Technical information regarding the Facility including location, depth, materials used, etc.;
- h) Inventory of dangerous material and chemicals present in the Facilities and plan for removal and potential alternative use;
- i) Particulars of each relevant Facility decommissioning and disposal alternative, including:
 - i. Measures to be taken to effect the decommissioning of Facilities;
 - ii. Schedule for decommissioning activities and description of equipment needed;
 - iii. Impact of the plan on other commercial activity in the area; and
 - iv. Information required pursuant to the safety regulations in force at any time.
- j) The Right Holders recommendation;
- k) Estimates of time required to complete the activities under the plan;
- l) Budget for the activities under the plan, including particulars of the cost of decommissioning Facilities;

m) List of breakdowns from the Decommissioning Fund in order to meet the cost of implementing the plan; and

n) Engineering and feasibility studies necessary to support the proposed plan.

The Minister, based on the recommendation of the Petroleum Administration, may exempt from or require further information or evaluations from the Right Holder with regard to the content of the disposal plan.

Article 61: Environmental Impact Assessment Study for Cessation and Decommissioning:

The provisions of Article 44 of Decree no. 8633 (Environmental Impact Assessment Rules) shall apply for the preparation of the environmental impact assessment study for the cessation of Petroleum Activities and decommissioning of Facilities.

The environmental impact assessment study shall cover all the areas which may be affected by the cessation of Petroleum Activities and decommissioning of Facilities. The environmental impact assessment study for the cessation of Petroleum Activities and decommissioning of Facilities shall take into consideration the relevant environmental impact assessment studies previously conducted.

In relation to the disposal of Facilities for which an environmental impact assessment study is also required pursuant to other legislation, a joint environmental impact assessment study may be conducted.

Article 62. Cessation of Production before a Plan for Decommissioning has been Approved:

In the event that the Right Holder considers that Production from a Development and Production Area will cease before a plan for cessation of Petroleum Activities and decommissioning of Facilities has been prepared, decommissioning measures for that Development and Production Area shall be prepared by the Right Holder in accordance with the requirements of this chapter. Where such measures have been approved by the Council of Ministers based on the recommendation of the Minister, decommissioning measures will take effect as an amendment to the plan for Development and Production for that Development and Production Area.

Article 63. Establishment of a Decommissioning Account:

The Operator shall, on behalf of the Right Holders, establish in a bank acceptable to the Central Bank of Lebanon an interest bearing escrow account. Such account shall be allocated for the decommissioning, and shall cover the total costs of implementing an approved plan for the cessation of Petroleum Activities and decommissioning of Facilities.

The account shall be opened no later than the time stipulated for the Right Holders' obligation to submit to the Petroleum Administration the first estimate of future decommissioning cost.

Article 64. Calculation and Payments into the Decommissioning Account:

Recoverable payment into the Decommissioning may not commence before 50% of the estimated recoverable reserves stated in the approved plan for Development and Production is produced.

No later than one year before the estimated commencement of the payments by the Right Holders into the Decommissioning Fund, the Right Holders shall:

- a) if no plan for cessation of Petroleum Activities and decommissioning of Facilities has been submitted, submit to the Minister, with a copy to the Petroleum Administration, an outline of alternative decommissioning solutions and Right Holders preferred alternative;
- b) submit to the Minister, with a copy to the Petroleum Administration, the estimated future decommissioning costs for the Right Holders preferred decommissioning alternative and for the other alternative decommissioning solutions; and
- c) submit to the Minister, with a copy to the Petroleum Administration, a table outlining estimated amounts payable to the Decommissioning Fund in United States dollars based on:
 - i. initial recoverable reserves and the projected Production schedule from the Development and Production Area;
 - ii. estimated total tariffs and fees generated in relation to any Facility constructed or operated pursuant to a Petroleum Right document absent an Exploration and Production Agreement; and
 - iii. estimated total decommissioning costs for the Right Holders' preferred decommissioning alternative and the other alternative decommissioning solutions.

The Minister, based on the recommendation by the Petroleum Administration, shall select from the proposed alternative solutions submitted by the Right Holders, a preliminary decommissioning solution to form the basis for the calculation of the estimated decommissioning costs to be covered by the decommissioning account.

Adequate provisions for successive reassessment of such estimates shall, when required by the Offshore Petroleum Resources Law, an Exploration and Production Agreement, other Petroleum Licence, or if deemed necessary by the Right Holder due to substantial changes in factual Data, also be included in any updated plan for cessation of Petroleum Activities and decommissioning of Facilities. Payments to the decommissioning account shall be made on a quarterly basis by each Right Holder proportionate to its participating interest, calculated on the basis of the estimated cost for implementation of the plan for cessation of Petroleum Activities and decommissioning of Facilities as reassessed, and the remaining quarterly instalments to be made.

In any calendar year in which the Right Holder has not submitted to the Petroleum Administration a revised plan for cessation of Petroleum Activities and decommissioning of Facilities or a reassessment of the total estimated decommissioning cost, the Right Holder shall update the value of the latest total estimated decommissioning cost in order to account for the escalation of such approved estimated decommissioning costs in the period between the calendar year in which such costs were estimated and the current calendar year. For this purpose, and for each calendar year, the applicable annual escalation index shall be based on the index stipulated by Producers Price Index for the Drilling of Oil and Gas wells as defined and published by the United States Bureau of Labor Statistics. The annual index to be used in year "r" shall be determined by the difference between the annual index relating to the year in which the latest approved estimate is determined and the same annual index relating such year "r". In the event the United States Bureau of Labor Statistics ceases, for any reason whatsoever, to publish the Producers Price Index for the Drilling of Oil and Gas wells as defined and published by the United States Bureau of Labor Statistics, or when an alternative currency is selected, the Minister shall approve, upon the recommendation of the

Petroleum Administration and the proposal by the Right Holder, either an alternative independent internationally recognised source, or an alternative recognized index.

Further instructions in relation to the establishment of the decommissioning account, its accounts, payment to, and withdrawal from the Decommissioning Fund may be specified in the Exploration and Production Agreement.

Article 65. Allocation of Cost Incurred for Future Decommissioning:

Costs incurred by a Right Holder to implement an approved plan for the cessation of Petroleum Activities and decommissioning of Facilities shall be Recoverable Cost to the extent such recovery is allowed under the applicable awarded Exploration and Production Agreement or other Petroleum Licence except where such costs have been funded by withdrawals from the decommissioning account. Such cost incurred shall not be deemed Capital Expenditure.

Article 66: Allocation of Remaining Funds and Shortfall of Funds:

Any funds representing recovered cost and that remain in the decommissioning account after the approved plan for cessation of Petroleum Activities and decommissioning of Facilities has been completed shall be treated as Profit Petroleum and the remaining balance shall be shared in between the State and the Right Holder in accordance with the Exploration and Production Agreement.

Any shortfall shall be met in full by the Right Holder in the event the decommissioning account at the time of implementing any plan for cessation of Petroleum Activities and decommissioning of Facilities is insufficient to fund the activities of that plan.

Article 67: Liability Related to Decommissioning:

The Right Holder and the owner of a Facility shall ensure that the decision relating to cessation of Petroleum Activities, decommissioning or disposal of a Facility is carried out. The Right Holder and the owner of a Facility are strictly liable for any direct loss or damage resulting from implementing an approved plan for the cessation of Petroleum Activities or decommissioning of Facilities. The obligation to implement the approved plan for the cessation of Petroleum Activities and decommissioning of Facilities is applicable even if the plan or the Petroleum Rights to be implemented are approved after the expiry of the Exploration and Production Agreement.

If the approved plan allows abandonment, the Right Holder and the owner of Facility shall be liable for any damage or inconvenience caused wilfully or inadvertently in connection with the abandonment of the Facility.

If there are more than one party liable according to the paragraphs of this article, such parties shall be jointly and severally liable for the damage, loss or financial obligations.

For the implementation of an approved plan for the cessation of Petroleum Activities and decommissioning of Facilities, it may be agreed between the Right Holders and the owner of a Facility on one side and the State on the other side that future maintenance, responsibility and liability shall be taken over by the State. The State taking over maintenance, responsibility and liability shall be subject to an agreed financial compensation to the State.

Unofficial Translation

Chapter 6 Production Entitlements and Fees

Article 68. Calculation of Area fee:

After the initial Exploration phase stipulated in each Exploration and Production Agreement has expired the Area fee due by the Right Holders shall be as follows:

- a) For the first year, the Area fee shall be three hundred fifty (350) United States dollars per km²;
- b) For the second and the following years the Area fee shall be four hundred (400) United States dollars per km².

When calculating the Area fee, the acreage comprised shall be rounded off to the nearest km².

Article 69. Area Fee Applied to a Partitioned Area:

In case of the partitioning of the Area covered by an Exploration and Production Agreement in accordance with the Offshore Petroleum Resources Law the Area fee shall, before the end of the current calendar year, be paid in advance for the Area delineated and partitioned off in accordance with the rate applicable to the original Area at the point in time the partitioning became effective.

For any subsequent year after the calendar year which partitioning of an Area became effective the Area fee shall be adjusted according the provisions of Article 72 of this Decree, provided that the rate of the Area fee applicable shall be as if no partitioning had taken place.

Article 70. Payment of Area Fee:

The Area fee shall be paid to the Lebanese Treasury in advance for each calendar year after the period stipulated as the Exploration phase in the awarded Exploration and Production Agreement has expired.

The Area fee is due for payment before the end of the current calendar year.

The Operator is responsible on behalf of the Right Holder for the proper calculation and payment of the Area fee.

Article 71. General Provisions Regarding Royalty on Petroleum:

Each Right Holder shall pay or deliver in kind Royalty without any cost at the delivery point specified in the Plan for Development and Production in the form of Crude Oil and other Petroleum relative to Right Holder's share of the Petroleum extracted from all Reservoirs covered by the relevant Exploration and Production Agreement or an approved unitisation agreement.

The volume of Crude Oil and other Petroleum extracted shall for Royalty purposes be measured separately at outlet of first separator and at the point of delivery as stipulated by the approved plan for Development and Production.

The application of this Article shall take into account the fourth paragraph of Article 43 of the Offshore Petroleum Resources Law.

Article 72. Calculation of Royalty:

Royalty shall be calculated on a daily basis.

Royalty for Crude Oil shall be paid or delivered in kind on the basis of the Royalty rate multiplied with the total quantity extracted on the day of Royalty rate calculation.

The Royalty rate for Crude Oil shall be assessed on the basis of escalating rates linked to the quantity of extracted oil. The schedule of escalating rates shall be set out in the Exploration and Production Agreement.

The Royalty rate for other Petroleum than Crude Oil shall be a fixed percentage defined in the Exploration and Production Agreement.

Petroleum that is released, discharged, vented or flared shall be subject to Royalty. If the quantity of Petroleum released, discharged, vented or flared cannot be metered, the Minister shall, based on a recommendation by the Petroleum Administration, stipulate the quantity which is deemed to have been released, discharged, vented or flared.

Article 73. Royalty Take:

The Royalty of Crude Oil and other Petroleum shall be based on the value of the Petroleum at the point of delivery stipulated in the plan for Development and Production without any cost. The point of delivery for Royalty purposes may not be located beyond the ultimate delivery terminal.

Royalty for extracted Crude Oil and other Petroleum to be paid and not delivered in kind for the period:

- a) From 1 January to 31 March, shall be compounded and paid by 15 May
- b) From 1 April to 30 June, shall be compounded and paid by 15 August
- c) From 1 July to 30 September, shall be compounded and paid by 15 November
- d) From 1 October to 31 December, shall be compounded and paid by 15 February the following calendar year

Royalty for extracted Crude Oil or other Petroleum to be paid and Royalty delivered in kind shall be paid or delivered as stipulated by the Offshore Petroleum Resources Law or the Exploration and Production Agreement. The Minister, upon the recommendation by the Petroleum Administration, may stipulate a provisional value for the calculation of Royalty on Crude Oil and other Petroleum when no price is available at the time of payment.

Royalty in kind shall be delivered as stipulated in the approved plan for Development and Production. If no final value upon which the calculation of Royalty for extracted Crude Oil or other Petroleum has been stipulated by the time limit for payment, then payment shall be made in

accordance with the provisional valuation carried out by the Minister with adjustments, if relevant, for transport costs.

Article 74. Cost Related to Collection of Royalty Taken in Petroleum:

The Right Holder may demand reimbursement for costs of transport, additional Processing or storage of Royalty Petroleum taken in kind between the point of delivery as stipulated by the approved plan for Development and Production and an off take point where the Royalty Petroleum is made available beyond the point of delivery, provided such costs that are subject to commercial terms are not higher than those incurred by the Right Holder for the Processing of his own Petroleum.

If special tariffs for Processing and transport or storage of the Right Holder's Crude Oil or other Petroleum have not been agreed upon, the Minister shall stipulate such tariffs applicable to Royalty Petroleum after having received proposals in this respect from the Right Holder.

Article 75. Documentation Relating to the Settlement of Royalty:

The Right Holder shall in the proposed settlement of Royalty obligations document how the Royalty for the extracted Crude Oil and other Petroleum has been calculated.

The calculation included in the Right Holder's proposed settlement of Royalty for extracted Crude Oil and other Petroleum shall be on a monthly basis, and as a minimum contain the following Data:

- a) Price obtained for each respective type of Petroleum extracted;
- b) Quantity of Crude Oil and quantity of other Petroleum; and
- c) When relevant, the currency exchange rate.

The calculation of deductible costs and expenses, when applicable, must be specified.

All volumes, revenues, costs and expenses shall be documented by copies of invoices and by making specified references to the accounts of the Operator for the relevant Reservoir and Facilities or projects.

Article 76. Cost Recovery:

The Right Holder shall bear and pay all costs incurred in carrying out the Petroleum Activities in which the Right Holder participates. The Right Holder shall exclusively be reimbursed for Recoverable Costs incurred by means of the Right Holder's entitlement to quantities of Petroleum referred to as Cost Petroleum as stipulated by the Exploration and Production Agreement .

Cost Petroleum shall be taken in the proportions that Crude Oil and other Petroleum occur at the point of extraction as stipulated and approved in the plan for Development and Production, and proportionate to the Right Holders participating interest in the Exploration and Production Agreement.

Disposable Petroleum shall be calculated on the basis of volumes extracted from all Reservoirs within a single Exploration and Production Agreement Area.

Unofficial Translation

The Cost Petroleum to which the Right Holder is entitled in any Quarter shall be calculated on the basis of the value of the Disposable Petroleum extracted during such Quarter. The Cost Petroleum of each Quarter in relation to Petroleum Activities in the Exploration and Production Agreement Area shall be equivalent to a percentage of Disposable Petroleum to be stipulated in the bid invitation for exclusive Exploration and Production rights.

To the extent that Recoverable Costs in any Quarter exceed the value of Cost Petroleum available in that quarter, the unrecovered excess shall be carried forward for recovery in the next succeeding Quarter or Quarters until fully recovered.

If the Right Holder has not recovered all the Recoverable Costs and if the Exploration and Production Agreement has expired, the costs that he incurred shall become irrecoverable and the Right Holder may not be compensated by any means whatsoever.

Article 77. Entitlement to Profit Petroleum:

The Right Holder's share exclusively in relation to Disposable Petroleum shall be proportionate to the Right Holder's share of Profit Petroleum in line with his participation rate in the Exploration and Production Agreement.

Profit Petroleum shall be taken from Disposable Petroleum in the proportions that Crude Oil and other Petroleum occur at the point of extraction as stipulated by an approved plan for Development and Production.

The Profit Petroleum shall be shared between the State and the Right Holder according to a scale varying with the value of the R-Factor, where the R-Factor is linked to the quarterly cumulative cash inflows and the quarterly cumulative capital expenditures.

The method of calculation of the R-Factor shall be specified in the Exploration and Production Agreement.

The Right Holder's Cost Petroleum, Profit Petroleum and operating cost calculations shall be done for each quarter. To the extent that actual quantities and expenses are not known, provisional estimates based on the approved work program and operating and capital budgets shall be used. Until such time as the value of Disposable Petroleum attributable to a given Quarter is determined, the calculations will be based on the value of such Petroleum during the preceding Quarter and in the absence of such value, on the value agreed between the Petroleum Administration and the Right Holder. Adjustments shall be made during the succeeding Quarter based on the actual Petroleum quantities, prices and expenses prevailing during the Quarter during which the adjustment is made.

The Right Holder shall, for accounting and reporting purposes, record Cost Petroleum and Profit Petroleum:

- a) in respect of the entire Exploration and Production Agreement Area; and
- b) separately in respect of each Development and Production Area if there is more than one Development and Production Area within the Exploration and Production Agreement Area; and
- c) in all cases in the form of Crude Oil and other Petroleum, and on a pro-rata basis relative to the volumes of Petroleum extracted.

Unofficial Translation

Article 78. Payment of Profit Petroleum:

Profit Petroleum for extracted Crude Oil and other Petroleum to be paid and not delivered in kind for the period:

- a) From 1 January to 31 March, shall be compounded and paid by 15 May
- b) From 1 April to 30 June, shall be compounded and paid by 15 August
- c) From 1 July to 30 September, shall be compounded and paid by 15 November
- d) From 1 October to 31 December, shall be compounded and paid by 15 February the following calendar year

Profit Petroleum taken in kind shall be delivered as stipulated in the approved plan for Development and Production.

Article 79: General Provisions Regarding the Valuation of Petroleum:

The price adopted for calculating Royalty payments and Cost Petroleum take shall be equivalent to the prevailing market price, at the point of delivery as stipulated by the approved plan for Development and Production for the quality and quantity traded at the time when the Petroleum was extracted.

When a market price is not established, or a prevailing market price is not available due to limited trade, Royalty to be paid shall be based on the prices obtained and other comparable estimations of the value relevant at the time the Petroleum was extracted from the Reservoir.

Article 80: Valuation of Crude Oil:

The value of Crude Oil shall be determined at the end of each calendar month commencing with the calendar month in which Production of Petroleum begins.

In case sales are made on terms which materially differ from those stated in the above paragraphs, then relevant adjustment, including netback calculation if applicable, shall be made relative to the sales value obtained for such sales. To the extent that Petroleum subject to valuation as stipulated in the Exploration and Production Agreement consists of Petroleum other than Crude Oil, then the value of such other Petroleum shall be determined at the end of each calendar month commencing with the calendar month in which Petroleum is extracted from the Reservoir.

The valuation of Petroleum shall be consistent with delivery at the point of delivery as stipulated by an approved plan for Development and Production, without any freight, insurance or other costs to be paid by the seller beyond that point, on 30 days payment term from the date of the bill of lading or equivalent document for transport of such Petroleum, and other terms as commonly applied in international trade for the relevant quality of Petroleum and mode of transport.

The value for each separate type of Crude Oil shall be:

- a) in the case of sales to non-Affiliated Companies, the weighted average price per Barrel at the point of delivery of each separate export grade of Crude Oil being the FOB (as such term is defined in INCOTERMS 2000) price, at which such Crude Oil has been sold by the Right Holder during that calendar month; or
- b) if the Right Holder sells the Crude Oil to a third party on terms different from FOB as such term is defined in INCOTERMS 2000, then for the purpose of the Exploration and Production Agreement, a calculated net-back FOB price shall be applied. The net-back FOB price shall be established by deducting from the agreed price the actual and direct costs incurred by the Right Holder in fulfilling the obligations under their sales contract in addition to those obligations provided for in a FOB contract.
- c) in the case of sales of Crude Oil to an Affiliated Company, such price is agreed between the Minister upon the recommendation by the Petroleum Administration or such entity holding a participation interest on behalf of the State and the Right Holder on the basis of adding the following two factors together:
 - i. the weighted average calendar month FOB price for Brent blend dated cargos as reported by Platt's Oilgram price report. The weighted average shall be based on the days in each calendar month when a closing price is reported in Platt's Oilgram price report. Days such as weekends and holidays with no price reports shall be ignored. If the Petroleum in question is of a quality for which Brent blend dated cargos is not a suitable price reference, such other appropriate marker to be used as reference for the pricing of the quality of Petroleum in question may be determined by the Minister based on the recommendation of the Petroleum Administration prior to Production of the Petroleum in question; and
 - ii. a premium or discount to the price of the Brent blend rated Crude Oil, or such other appropriate marker for Petroleum in question shall be determined by reference to the quality of the Petroleum determined in accordance with above item i), shall reflect differences in Petroleum quality, delivery location and conditions and prevailing with transaction between unrelated parties consistent with fair market valuation.

In any case in which the State or the entity holding the participation interest on behalf of the State and the Right Holder are unable to agree a price pursuant to the fifth paragraph letter (c) of this Article , in order to determine the premium or discount referred to therein the following procedures shall be undertaken:

- a) the State, or the entity holding the participation interest on behalf of the State, and the Right Holder shall submit to each other their assessments of the premium or discount together with an explanation of the key factors taken into consideration in assessing the premium or discount;
- b) if the premium or discount submitted by the State or the entity holding the participation interest on behalf of the State and the Right Holder respectively, are within ten United States cents per Barrel of each other, the average will be taken for the purposes of setting the final value of the Crude Oil;
- c) if the premium or discount submitted by the State or the entity holding the participation interest on behalf of the State and the Right Holder respectively, differ by more than ten United States cents

per Barrel, each will resubmit a revised premium or discount to the other on the third business day after the first exchange of information;

d) if the premium or discount submitted by the State and the entity holding the participation interest on behalf of the State and the Right Holder respectively, in the second exchange of information are within ten United States cents per Barrel of each other the average will be taken for the purposes of setting the final value of Crude Oil;

e) if the premium or discount submitted on the second exchange of information between the parties differ by more than ten United States cents per Barrel, the matter shall be subject to the applicable conflict resolution mechanism selected or be addressed by selecting an independent expert in agreement between the State and the Right Holders.

Article 81. Valuation of Petroleum Other than Crude Oil:

The value calculated for Petroleum other than Crude Oil extracted from Reservoirs within the Exploration and Production Agreement Area shall be:

a) in the case of sales to non-Affiliated Companies, the weighted average price per mmbtu of commercial specification of the relevant quality of the Petroleum at the determined point of delivery at which such Petroleum has been delivered by the Right Holder during that calendar month, shall be the weighted average price per mmbtu of all other commercial specification of such Petroleum delivered during the same calendar month from Reservoirs subject to the jurisdiction of the Republic of Lebanon and the weighted average of posted or publicly available prices for alternative fuels to the quality of Petroleum in question for large scale industrial consumers, including power stations in the market where such power has been delivered to ultimate customers.

b) in the case of sales to an Affiliated Company, such price as stipulated in sub-paragraph a) above for sales to a non-Affiliated Company, or such price agreed between the Minister upon the recommendation of the Petroleum Administration, or the entity holding the participation interest on behalf of the State, on one side, and the Right Holder, on the other side.

c) in the event that the State enters into a sales agreement, or a purchase agreement for any quantity of Petroleum with the Right Holder, such sales or purchases shall be at a price no higher than the price of Petroleum sold to an Affiliated Company from the Development and Production Area as determined in this Article.

Article 82. Sale of Royalty and Profit Petroleum:

The Right Holder may, unless otherwise agreed, sell the portion of Royalty volumes not taken in kind by the State proportionate to the Right Holder's participation interest. The implementation of this Article shall take into consideration the provisions of paragraph 4 of Article 43 of the Offshore Petroleum Resources Law.

The Operator shall, unless otherwise agreed, sell on a joint and dedicated basis the Royalty taken in kind by the State and the share of Profit Petroleum which the State is entitled to, together and at the same terms and conditions that apply to the sale of his portion of Disposable Petroleum. The Operator shall calculate the joint deductible expenses incurred when joint sales are made. Expenses incurred for joint sales shall be apportioned to and reimbursed by the individual Right Holder and the State as applicable.

Unofficial Translation

The Minister may, based on the opinion of the Petroleum Administration, by six (6) month-notice given to the Operator or a Right Holder, require the Operator or the Right Holder to sell on behalf of the State during the succeeding calendar year(s) the whole or any portion of the volume of Royalty taken in kind, and when applicable, Profit Petroleum not previously committed to which the State is entitled pursuant to the Exploration and Production Agreement during said succeeding calendar year(s). The quantity of such Royalty taken in kind and Profit Petroleum, which the State desires to sell, shall be specified in said notice. The Right Holder or Operator shall sell that quantity of Petroleum on the open market at the best price reasonably obtainable and remit the proceeds of the sale directly and forthwith to the State. The Right Holder or Operator shall not charge the State for any fees incurred for selling Petroleum of the State.

The sale of such Petroleum shall, unless otherwise instructed by the Minister based on the recommendation by the Petroleum Administration take place on a joint dedicated basis by the Right Holder, and the Right Holder shall hold those entitlements in undivided proportions equal to the proportions to which each Right Holder was entitled during that period. The Minister's decisions relating to sales shall not affect the volumes of Petroleum already subject to contract.

The proceeds from the sale of Petroleum in any given period shall be divided between the State and the Right Holder in proportion to their title in the undivided entitlements to the Petroleum sold as stipulated in the Exploration and Production Agreement.

Article 83. Costs Related to Training and Support Programs:

The Right Holder shall pay to the State when stipulated in the Exploration and Production Agreement its respective share of annual costs to be spent on training and support programs for training of public sector personnel and as institutional support.

Any commitment by a Right Holder to training or institutional support programs may be stipulated in detail in a separate agreement. Such agreement shall form an integral part of and constitute a condition for the granting of a Petroleum Right.

If amounts for a calendar year exceed those agreed or stipulated, then such incurred cost or amount contributed shall be credited against the following year's training obligation. When cash payments have to be made, then the first payment shall be made on the first anniversary of the entry into force of the relevant legal basis for the committed program, and subsequent payments shall be made on the subsequent anniversaries thereof.

The Right Holders shall include proposals of activities required to satisfy the obligations contained in this Article as part of the plan for Development and Production and plan for construction, placement and operation of a Transportation or storage Facility.

The sums spent by the Right Holder to satisfy the obligations contained in this Article shall be Recoverable Costs for the purpose of the accounting and financial procedure of the relevant Exploration and Production Agreement or Petroleum License.

In order for the Petroleum Administration to monitor the fulfilment of the employment and training obligations contained in this Article, each Right Holder shall annually submit his recruitment and training programs to the Petroleum Administration.

Unofficial Translation

Article 84. Audit:

The Petroleum Administration may at any time audit the Operator and the Right Holder in order to verify information submitted in relation to measurement, calculation, valuation for the settlement of Area fees , Royalty, cost recovery and profit entitlement or in relation to any other required reporting to the Minister or to the Petroleum Administration.

Chapter 7 Drilling and Wells**Article 85. Classification of Wells:**

The Minister, based on the opinion of the Petroleum Administration determines well classification. Classification takes place the first time at the registration of a well or a wellbore, and as required in respect of subsequent application for reclassification. In the event of a need for reclassification, the Right Holder shall well in advance of change of use submit an application to the Minister with a copy to the Petroleum Administration, which will determine new classification.

The Minister, based on the opinion of the Petroleum Administration, determines classifications for surveys, including track and subsurface surveys.

Article 86. Registration of Wells and Well Paths:

The Right Holder shall obtain registration number and well and well path designation from the Petroleum Administration in respect of each separate well or well path prior to commencement of drilling activities. New well path designation shall be obtained in the case of side tracking to a new well target. Application for registration shall be submitted in the format specified by the Petroleum Administration no later than two weeks prior to the estimated commencement of the drilling activities.

The Right Holder shall, before the commencement of the drilling activity, obtain registration number for shallow boreholes, which are planned to be drilled to a depth exceeding 25 meters. This applies to any drilling of shallow boreholes carried out under any type of Petroleum Right.

Article 87. General Requirements for Drilling and Wells:

Drilling and well activities shall at all times be carried out in a safe and proper manner. This entails that:

- a) Measures shall be taken to ensure regularity and prevent the interruption of Petroleum Activities;
- b) Operating and maintenance procedures shall take due consideration of relevant Facilities and equipment specifications such as their predetermined operating and maintenance limits;
- c) Operational measures shall be taken to prevent fires, explosions, pollution, or any other sort of damages;
- d) Well casing shall be designed, developed and installed so that it is adequate to the subsurface environment, and provide control at all times;

Unofficial Translation

e) Safety equipment for drilling shall be installed in accordance with the requirements of the planned activities and with the Offshore Petroleum Resources Law;

f) The seabed shall be examined prior to commencement of drilling or prior to the installation or placement of Facilities or equipment required to drilling a well so as to ensure that the external environment will not cause damage to existing Facilities; and

g) Prior to commencement of drilling or well related activities, an emergency response plan shall be prepared and submitted for review by the Petroleum Administration, designed to achieve rapid and effective emergency response in the event of a blow-out or fire, discharge, waste or loss of Petroleum or damage to Petroleum bearing strata.

Article 88. Risk Management Related to Drilling and Wells:

The Right Holder shall ensure that the Operator shall:

a) Establish plans and procedures for drilling and operation of wells;

b) Identify, by means of risk analyses, situations where well control may be lost or other hazardous situations that may occur;

c) Establish the operational limits applicable to drilling and well activities undertaken within the same Facility;

d) The position of the well shall be determined in accordance with recognised position methods; and

e) Establish plans for the repair of wells in case of loss of well control.

In the event of any release, discharge or escape of Petroleum or pressure, blow-out or fire, waste or loss of Petroleum, or damage to Petroleum bearing strata, the Operator shall notify the Minister and the Petroleum Administration immediately. The Operator shall promptly implement the relevant emergency response plan, and thereafter submit a full report thereon to the Minister and the Petroleum Administration.

Article 89. Health Safety and Environment Requirements Regarding Drilling and well Related Activities:

The Operator shall, with regard to drilling and well activities, ensure that no single failure may entail life-threatening situations or injury for the personnel involved or significant damage to Facilities, material, third party property or to the environment. This applies both to operational errors and to failures related to Facilities directly used in drilling activities, as well as to equipment with auxiliary functions.

The Operator shall ensure that at least two independent and sufficiently tested barriers are in place in order to prevent an accidental flow from the well during drilling and well related activities. If one barrier fails, well related activities may not proceed before its restoration. The Operator shall establish and continuously update a barrier plan for each projected activity to be carried out from a Facility. The Operator shall define operational requirements with regard to the drilling capability of equipment and to its control, as well as to operative and mobilization capability so as to comply with the barrier plan. All systems and components shall meet these requirements.

Unofficial Translation

The Operator shall ensure that work areas within drilling and well related activities are arranged so as to ensure adequate safety for personnel and operations. The Operator shall give special attention to storage, assembly, disassembly and suspension of drill pipe, drill collars and casing, as well as to transport of such equipment between the storage location and the drilling unit.

The Operator shall, in case of a proven probability of encountering shallow gas, take the necessary measures particular to the situation to ensure that activities are safely carried out.

The Operator shall, in accordance with safety and operational criteria, ensure that oil based and synthetic oil based drilling fluids are used only when this is required.

The Operator shall ensure that fluid volumes are verified prior to, during and subsequent to the removal of equipment from the well. The Operator shall establish procedures to remove the unintentional influx of fluids from the well, as well as to maintain pressure control in the event of their loss.

The Operator shall ensure that formation testing including drilling, hydraulic fracturing, acid treatment or other physical or chemical treatment of the well is done according to requirements in these Regulations and with the best practices of the Petroleum industry.

The Operator shall ensure that well control equipment is periodically tested and examined under pressure so as to verify its barrier functions.

Production of Petroleum from multiple zones or Reservoirs through one Production line shall, unless specifically stated in the approved plan for Development and Production, be subject to the approval of the Petroleum Administration.

Article 90. Drilling and Well Plan:

The drilling and well plan shall contain all overall and general information relevant to drilling and the well related to the Exploration and Production Agreement.

A drilling and well plan for activities planned to be performed during the Exploration phase shall be submitted to the Minister with a copy to the Petroleum Administration as part of the application for the exclusive Petroleum Right to carry out Petroleum Activities in accordance with an Exploration and Production Agreement.

The Minister shall, based on the opinion of the Petroleum Administration, determine the methods and format pursuant to which the drilling and well plan must be established.

The Petroleum Administration shall be informed of any substantial alterations in relation to the drilling and well plan.

Article 91. Content of the Drilling Program:

Based on the drilling and well plan, the Right Holder shall prepare a drilling program for each well to be drilled, which shall include the following information, as appropriate:

- a) Identification of the Exploration and Production Agreement under which the drilling activity is conducted;
- b) Name and contact details of the Right Holder and of the party carrying out the drilling activities, including an organization chart showing positions, relevant contact information such as telephone numbers and e-mail addresses;
- c) Accurate information about the Area of the drilling activity described in geographical coordinates, and in map format, including location of Facilities and equipment, and water depth;
- d) Brief history of the activities under the Exploration and Production Agreement;
- e) The regional geology in the area including all relevant information about geological and Reservoirs technical matters, such as; an outline of the prospect and well location, lithological column with depths, formations with explanatory text, pressure and temperature;
- f) The prospects, including a map (time and depth), geological description, velocities, intersecting seismic lines through the well, and at least one geo-seismic section;
- g) The estimated initial, but undiscovered volumes of Petroleum in each strata or Reservoir, a description of uncertain volume estimates and recoverable volume estimates, and the method of estimation. The volume estimations and range of uncertainty shall be reported according to a classification system approved by the Petroleum Administration;
- h) The Right Holders proposal for classification of the well;
- i) Schedule of the drilling activities, including date of commencement and conclusion of the drilling activities;
- j) The drilling methods to be used, including technical specification of all instruments;
- k) The planned sequence of drilling and associated borehole operations specifying, *inter alia*, the hole size, mud used, geological formations logging and borehole testing operations, casing design, cementing operations, possible Production tests and well completion procedures;
- l) The Facilities, and other devices that are to be used during the drilling activities including; name, call signals, IMO numbers and nationality;
- m) Planned calls, if any, into Lebanese internal waters;
- n) An assessment of potential incidents and accidents related to drilling and related Petroleum Activities pursuant to Offshore Petroleum Resources Law, including documenting any risk to the environment and documentation of efficient methods and solutions for probability and consequence reducing efforts;
- o) Assessment of the potential impact on the environment within the area affected or potentially directly affected by the Petroleum Activities, and on other activities in the area, including mitigation measures;
- p) Compilation and gathering of any Data necessary to perform the assessments;

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- q) A contingency analysis based on results of the assessments performed;
- r) An emergency response plan pursuant to the Offshore Petroleum Resources Law, covering possible incidents or accidents related to drilling and related Petroleum Activities;
- s) Other information required pursuant to the Health Safety and Environment regulations in force at any time;
- t) The Data acquisition program with reference to the criteria for Data acquisition pursuant to these Regulations, and a table showing planned formation evaluation;
- u) Description of how the results will be presented, the format of the collected Data and the recipients;
- v) The management documents and management systems relevant for the drilling activities
- w) Preparations for the presence of Government representative on board vessel(s) or craft(s) used;
- x) Documentation of insurance established regarding drilling activities;
- y) Information regarding applications submitted to other Government entities pursuant to other applicable legislation; and
- z) Any other information relevant to the drilling activity that the Petroleum Administration deems necessary.

Article 92. Drilling Permit:

Before commencement of drilling of any individual well or well path deeper than fifty (50) meters, a drilling permit must be granted by the Minister based on the opinion of the Petroleum Administration.

The Right Holder shall no later than eight (8) weeks prior to the planned commencement of drilling a well submit an application for a drilling permit to the Minister with a copy to the Petroleum Administration.

The application for a drilling permit shall consist of a drilling program and proposal for well name and registration number.

The Minister shall notify the applicants no later than six (6) weeks after receiving the application, whether the application for drilling permit is rejected or approved. If the application is rejected, the Minister must set out the reasons for the rejection.

Article 93. Conditions, Exemptions or Exceptions for Drilling Permits:

The Minister shall, based on the opinion of the Petroleum Administration determine the conditions to the drilling permit including, but not limited to, the following:

- a) The management of the drilling activities;

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- b) The insurance established in relation to the drilling of the well;
- c) The vessel or craft and equipment used in the drilling and in support of the drilling of the well;
- d) The implementation of the drilling activities;
- e) Notification of the Petroleum Administration of sale or exchange of results from the drilling campaign; and
- f) Any other issues determined by the Minister based on the opinion of the Petroleum Administration.

The Minister, based on the opinion of the Petroleum Administration, may grant exemptions or exceptions from the conditions of the drilling permit if special circumstances or substantial resource management reasons warrant such exemptions or exceptions.

The Minister and the Petroleum Administration shall immediately be informed of any alterations in relation to the drilling program on which the Minister based his original decision. The Minister, based on the opinion of the Petroleum Administration, may order that the activities be postponed until a new drilling program has been submitted and approved.

Article 94. Notification of Well Related Activities:

The Right Holder shall notify and inform the Minister with a copy to the Petroleum Administration, and no later than twenty four (24) hours before commencing any of the following well related activities that lead to the physical change of a wellbore:

- a) Well testing;
- b) Well completion;
- c) Suspension, plugging and abandonment of a well;
- d) Re-entry into an existing Exploration or Production well; and
- e) Well intervention.

The notification shall contain details on the method and procedure to be applied, and the proposed timetable for carrying out the well related activities.

The well related activities shall be undertaken in accordance with the Offshore Petroleum Resources Law and relevant industry, safety and environmental best standards. The Minister, based on the recommendation of the Petroleum Administration, may order any changes to the well related activities if deemed necessary for reasons of resource management, health, safety or environmental protection.

The Right Holder shall notify the Minister and the Petroleum Administration immediately if either a well integrity hazard has been identified in relation to the well, or there has been a significant increase in an existing risk in relation to the well.

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The Minister, based on the recommendation of the Petroleum Administration may intervene in drilling or well related activities.

Article 95. Acquisition of Data from Drilling and Other Well Activities:

The Right Holder shall ensure that all necessary samples such as cuttings, conventional cores, sidewall cores, liquid and gas samples, logs and test Data are collected during drilling and other well activities. The Petroleum Administration may stipulate requirements for Data acquisition, Processing and analyses in each individual case.

If not otherwise stated, the requirements for cuttings are:

- a) During Exploration, wells samples of cuttings shall be taken of all penetrated geological formations drilled, and the sampling shall commence as soon as return of drilling fluid has been established;
- b) In a representative selection of Development wells, samples of cuttings shall be taken of all penetrated geological formations;
- c) The interval between the samples should not exceed 10 meters; and
- d) The interval between the samples in potential Petroleum bearing layers of Exploration wells should not exceed 3 meters if conventional cores are not taken.

If not otherwise stated, the requirements for cores are:

- a) In wells drilled for the purpose of making a Discovery at least one conventional core shall be taken from all zones containing Petroleum;
- b) Furthermore necessary cores should be taken of potential source rock types and Reservoir rock types;
- c) From selected wells drilled for the purpose of assessing a Discovery, conventional cores should be taken from the entire Reservoir section;
- d) From selected wells drilled for the purpose of Development or Production of a Reservoir conventional cores should be taken from the entire Reservoir section; and
- e) Sidewall cores are to be taken to the extent this is necessary.

If not otherwise stated, the requirements for fluids are that fluid samples shall be taken in connection with formation testing and formation test logging.

If not otherwise stated, the requirements for logs are:

- a) well logs shall be run in all wells and well paths. The well logs shall be susceptible to correlation and shall at least enable an interpretation of lithology and estimation of porosity and water saturation, hydrogen index and fluid typing; and

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b) Formation logging shall be carried out in Exploration wells to establish pressure gradient type of fluids and fluid contacts in a formation, and of their Production capability.

Article 96. Periodic Reports during Drilling and Other Well Activities:

During drilling and other well activities, the Right Holder shall daily and weekly prepare and submit reports regarding the ongoing activities to the Petroleum Administration.

The daily report regarding drilling and other well activities shall be prepared and submitted at the time and in the format decided by the Petroleum Administration. The report shall include the following information:

- a) Identification of the Petroleum License under which the activities are conducted;
- b) Name and contact details of the Right Holder and the party carrying out the activities;
- c) Designation of the well;
- d) Location and coordinates of the well;
- e) Activity carried out, including depth drilled;
- f) Well profile table and drawing;
- g) Lithology of formations penetrated;
- h) Any indications of Petroleum;
- i) Borehole geometry;
- j) Results of surveys made in the wellbore;
- k) Any incidents; and
- l) Well program deviation reports.

The weekly report regarding drilling and other well activities shall be prepared and submitted at the time and in the format decided by the Petroleum Administration. The report shall include the following information:

- a) Identification of the Petroleum License under which the activities are conducted;
- b) Name and contact details of the Right Holder(s) and the party carrying out the activities;
- c) Designation of the well;
- d) Location and coordinates of the well;
- e) A summary of the daily reports of the drilling and other well activities; and

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f) Summary of the materials used.

Article 97. Submitting Data and Material after Completion of Drilling and Other Well Activities:

The Right Holder shall submit samples and sample preparations and Processing related matters, including, *inter alia*, thin sections from each individual well or well path to the Petroleum Administration.

The material collected shall be submitted to the Petroleum Administration and no later than six (6) weeks after completion of the drilling of the well or other well activities.

The Petroleum Administration may stipulate requirements to Data acquisition, Processing and analysis in each individual case.

Unless otherwise determined by the Petroleum Administration, the minimum requirements for cuttings are:

a) From Exploration wells samples, cuttings from all rock types in all geological formations where samples have been collected shall be submitted;

b) From the first Production well of the Development and Production Area, cuttings from the whole wellbore shall be submitted. If drilling later is carried out in formations not computed by the first well, cutting should be submitted from the whole Reservoir interval in these wells;

c) From unwashed cuttings, at least 1 kg dried material shall be submitted from each sampling interval. Unwashed cuttings shall be dried at 40⁰ C or lower. If the quantity of cuttings is limited, e.g. as a result of slim hole drilling, at least half the collected cuttings shall be forwarded, limited upwards to 1 kg;

d) Thin sections shall be submitted to the Petroleum Administration in a format as specified by the Petroleum Administration; and

e) From washed cuttings one rig set shall be submitted.

Unless otherwise determined by the Petroleum Administration, the minimum requirements for core samples are:

a) Where conventional cores are taken, a complete longitudinal section shall be submitted to the Petroleum Administration. It shall comprise at least one Quarter of the core from Exploration wells and one half of the core from Development wells. If the core diameter is less than 7.6 cm (3 inches), the Petroleum Administration shall receive at least one half of the core also from Exploration wells;

b) If full diameter cores have been used for the purpose of special core analyses, the Right Holder may make an application for individual core intervals to be kept temporarily as full diameter cores and be treated for use in special core analyses. When such analyses have been carried out, the results shall be submitted to the Petroleum Administration. The rest of the material shall be sealed and safely stored by the Right Holder; and

c) Colour photographs of the cores shall be submitted together with conventional cores. The photographs are to be taken immediately after cutting, and shall show well path designation, core number, depth, orientation and scale.

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Unless otherwise determined by the Petroleum Administration, the minimum requirements for fluid samples from formation testing and formation test logging are:

- a) 2 x 1/2 litres of each individual fluid oil, condensate, formation fluid from each interval or set of intervals tested shall be taken at representative Reservoir conditions. If a test yields less than 2 x 1/2 litre smaller quantities may be submitted;
- b) For all test types the fluid shall be sampled at ordinary ambient service conditions at the surface, *i.e.* ca. 101,3 kPa (1 Atm) and 20⁰ C;
- c) The sampling shall be carried out in a way that ensures that the sample is as representative as possible of the formation fluid;
- d) While sampling, real time fluid analysis shall be conducted; and
- e) Standard sample bottles as defined by the Petroleum Administration, shall be used and shall be filled to a maximum of ca. 85 percent of the total bottle volume.

Unless otherwise determined by the Petroleum Administration, the minimum requirements for palynological preparations are:

- a) Duplicate of palynological and micro palynological preparations from cuttings, side wall cores and conventional cores shall be submitted;
- b) The contents of preparations must be representative of the sample; and
- c) Preparations are made with a permanent mounting substance of plastic polymer.

Article 98. Well or Production Tests:

Notification regarding any planned Production test of a formation or Reservoir shall be submitted to the Minister and the Petroleum Administration as early as possible, and no later than three days prior to commencement of the well or Production test activities.

The notification regarding the planned well or Production test shall contain the following information:

- a) Purpose of carrying out the test, use of Petroleum, cost breakdown and income from sale, if any;
- b) Duration of flow periods and shut-in periods;
- c) Estimated rates for Crude Oil and other Petroleum, and volume indication for flaring or venting to air and discharges to water or soil;
- d) Evaluation of consequences to the environment;
- e) Planned volume of Reservoir liquid to be taken out and analyses intended to be carried out on such Reservoir liquid;

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f) Planned Production logging, if any; and

g) Preliminary log evaluation in the form of a computer process interpretation log in true vertical depth and measured depth from the Reservoir on a scale 1:500 and 1:200.

Article 99. Reports on Modification, Abandonment or Suspension of a Well:

The Right Holder shall provide the Minister, with a copy to the Petroleum Administration, with a report providing details of any repair, modification, re-completion, Production test, abandonment or suspension of a well within three months of the activity having occurred.

Article 100. Permanent Plugging of Wells:

Information on the method and procedure planned to be applied for the permanent plugging of a well shall be submitted and the necessary logs shall be made directly available to the Petroleum Administration as soon as possible and no later than 24 hours prior to commencement of such activities.

The Operator shall ensure that the zone depths with their respective flow potential are identified prior to temporary or permanent plugging of a well, to prevent any eruption or leakage of Petroleum or other formation fluids.

Article 101. Final Report, and Reports on Interpretation Work Executed After Drilling and Other Well Activities:

The Right Holder shall submit a final geological and technical report in relation to the Reservoir in respect of each well or well path to Minister, with a copy to the Petroleum Administration, no later than six (6) months after the individual drilling or well activity has been completed.

Unless otherwise determined by the Petroleum Administration the report shall comprise at least the following information:

- a) Identification of the Petroleum License under which the activities are conducted;
- b) Name and contact details of the Right Holder(s) and the party carrying out the activities;
- c) Name of the drilling unit used;
- d) Designation of the well;
- e) Location and coordinates of the well;
- f) Depth of sea water in which the well was drilled;
- g) True vertical depth and measured depth of the well;
- h) Commencement and conclusions of the drilling activities;
- i) Statement whether the well has been completed as a producing well, suspended as a potential producing well, or abandoned;

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- j) Results of formation fluid sampling tests, Production tests and analyses carried out;
- k) Equipment installed in the well;
- l) Cementing operations carried out;
- m) Descriptions of geological samples such as cuttings, sidewall and conventional cores;
- n) All surveys and measurements made in the well, including any detailed interpretations;
- o) Geological interpretation of the observations made;
- p) Interpretations of all wireline log Data in a format acceptable to the Petroleum Administration, including full processed survey results, and computer processed interpretation logs;
- q) Where other surveys have been carried out: such information or material as requested by the Petroleum Administration;
- r) Where available; interpretation of all fluid sample analyses;
- s) Reports on cores and cuttings recovered; and
- t) If the well is a Discovery, potential resources and reserves shall be reported according to the Petroleum Administration resource classification scheme.

All descriptions and interpretations of well Data shall be made available to the Petroleum Administration on a continuous basis. This applies also when interpretation or other updating is carried out after the submission of the final report.

Chapter 8 Facilities

Article 102. Financing and Ownership of Facilities:

The Right Holder shall finance the cost related to the construction or lease, and the operation of all Facilities and appurtenant equipment to be used in Petroleum Activities pursuant to the Petroleum Right.

Subject to the Offshore Petroleum Resources Law, the Right Holder shall have the right to use such Facilities and equipment for the performance of Petroleum Activities during the term of that Petroleum Right.

The Right Holder shall be the owner of Facilities and necessary appurtenant equipment for the purpose and use in Petroleum Activities under a Petroleum Licence unless otherwise approved by the Minister based on the recommendation of the Petroleum Administration.

Notwithstanding the right of the State pursuant to the provisions of the Offshore Petroleum Resource Law to transferring ownership or right of use of Facilities and appurtenant equipment, moveable Facilities and equipment owned by other physical or legal persons than a Right Holder may be freely exported from the Republic of Lebanon in accordance with the aforementioned law and terms of the Exploration and Production Agreement or Petroleum Licence.

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Article 103. General Requirements to Design and Construction of Facilities:

Facilities and work sites shall be planned, designed, built, equipped, and set up so as that the various Petroleum Activities can be performed safely and efficiently in accordance with best Petroleum industry practices and best pipeline practices.

The Right Holder shall base his design on the Offshore Petroleum Resources Law and internationally recognized codes and standards. These principle standards and codes shall be listed in the plan for Development and Production. The Facilities and work sites shall also meet the requirements of all applicable national and international standards and codes. Different standards should not be applied within the same area.

The entity selected by the Right Holder to be responsible for the supervision of the design shall be an independent organization in relation to the constructor of the design. If reference is made to recognized standards with different specifications, the supervision carried out according to such standards shall be included as part of the entire verification. The evaluation of the verification method used in the various phases shall take into account the complexity and critical intensity of the design.

Planning of new Facilities and modifications to existing Facilities shall take into account the available equipment, as well as new technologies, so as to maintain the management system objectives set forth in these Regulations. Deficiencies which may trigger danger or accident situations must be prevented during the Development and Production phases.

Functional requirements of the Facilities must be documented, defining the operating lifetime of the design, for which purpose possible variations in flow rates, pressure conditions, temperatures, composition and nature of fluids shall be taken into account. The operating and maintenance requirements of the Facilities shall be documented during the design phase in order to provide the grounds for the conception of the corresponding procedures to be implemented.

While designing the Facilities, the Right Holder shall ensure the best possible access for their inspection and maintenance. Facilities shall be designed so as to ensure means of access and evacuation and shall have available adequate rescue equipment.

Facilities shall be designed so as to reduce the consequences of fire and explosion. Systems and components shall be designed to minimize the probability of blow out, fire and explosions, as well as to enable effective fire-fighting and to limit the extent of personnel injury and equipment damage. Appropriate detection systems for fire and gas shall be installed. Facilities shall be classified in terms of explosion risk and divided into zones according to such criteria, to internationally accepted standards and to best Petroleum industry practices and best pipeline practices.

Facilities containing Petroleum must be ventilated and shall, if necessary, have built-in pressure relief panels.

All Facilities and work sites shall be kept in a proper and safe working condition during construction activities.

Article 104. Facility Risk Analysis:

Based on duly considered criteria, the Right Holder shall perform mandatory risk analyses of the Facility's operations and activities associated therewith, which shall be deemed part of the layout and designs.

Risk analyses shall be carried out in order to identify the consequences to personnel, property and the environment, including financial interests, of single or sequential failures that may occur.

For the purpose of risk analyses, it should be taken into account, among other elements, the design of the Facility, the activities and operations to be carried out, equipment, work processes and training programs for personnel engaged in the activity.

Measures shall be taken in the design of the Facilities and planning of Petroleum Activities to eliminate or reduce the risks identified through risk analyses.

Risk analyses must be performed so as to be in line with the progress of Petroleum Activities.

Special emphasis shall be given to incorporation of the risk analysis results into operating manuals, procedures and reporting requirements.

Article 105. Control Systems:

During the phases of design, manufacture, installation and operation of control systems, the installation, its classification as a safety area and the main safety plan shall be taken into account.

The control systems shall be operable by independent panels which must be conveniently located.

The possibility of reducing failures or its consequences shall be taken into account in outlining or designing of control systems. The control system components with critical functions shall in the event of failure of the control system, remain in good working conditions.

Article 106. Offshore Facilities, Vessels and Crafts:

In accordance with Lebanese law and, when applicable, internationally accepted marine standards, floating or fixed Facilities used offshore shall be designed and equipped in such a manner capable of ensuring the stability or foundation necessary for their safe operation and the capacity to withstand the projected loads.

The docking gear, the anchorage system and the dynamic positioning system for vessels, crafts or floating Facilities used offshore shall be dimensioned and operated in accordance with applicable Lebanese law and with good Petroleum field practices and internationally accepted marine standards.

The Minister may, in accordance with the Offshore Petroleum Resources Law, introduce other requirements related to the performance of Petroleum Activities by floating Facilities, vessels or crafts, independent of whether they are registered in Lebanon or in a foreign state.

Article 107. Drilling Facilities and Wells - Equipment and Materials Requirements:

Suitable equipment and materials shall be used in the implementation of drilling and well activities and such equipment and materials shall be protected from anomalous loads. Separate well intervention units and equipment shall be designed, built, installed, tested, used and maintained in accordance with these Regulations and applicable international standards.

The drilling and well equipment, and Facilities shall be fitted with accessible equipment capable of ensuring control of the well, of allowing the work of personnel, and of shutting down the well in case of an uncontrollable influx into the well. In the event of equipment failure, mobile Facilities shall be repositioned onto a safe area when the well is in an uncontrolled flow situation.

A blowout preventer, meaning an emergency blind ram and a shutdown valve installed at the top of a well during the drilling or well testing, which incorporates a hydraulic systems capable of closing over the space around the drilling tube despite high pressure preventing the escape of liquids or gases from a well, shall be designed and installed in order to preserve its capability to function as a barrier and shall be installed and start functioning during the initial phase of the activity.

Pressure exposed equipment shall be designed, built, tested and maintained in accordance with requirements contained in these Regulations and with the internationally accepted technical standards. Safety devices shall be tested in accordance with established procedures. When safety devices are activated a pressure control system shall be implemented so as to avoid injuries to personnel, damages to Facilities, material, third party property and to the environment and to assets and financial interests.

Valves and actuators of the Christmas tree type and safety valves shall be installed in a sufficient number and in such a manner as to preserve their barrier functions and shall be individually and collectively tested in accordance with established procedures, as well as with a test program. These procedures apply to operability tests and those regarding leaks or spills.

The Facility shall be equipped with tanks with sufficient capacity to support the quantity of drilling fluid necessary to ensure full control of the well and to contain, at all times, sufficient quantities of drilling fluids and other substances. The drilling fluid system shall have adequate capacity to support a rapid increase of drilling fluid in an active system, as well as capacity for the increasing weight of the drilling fluid in the case of well instability. A reconditioning system with the necessary equipment for the separation of drilled out formation, cuttings and Petroleum from drilling fluid shall be implemented in order to ensure the required quality of the drilling fluid. The composition of the drilling and completion fluids shall, at all times, be adjustable in order to ensure that the required properties of the fluid are preserved. It shall be possible to monitor, on a continuous basis, the fluids which comprise a barrier or that form part of the barrier's element.

Article 108. Equipment for Registration of Data:

Based on the opinion of the Petroleum Administration, the Minister may require that Facilities shall be equipped, at the cost of the Right Holder, with instruments for registration of Data which are deemed important for the management, monitoring and control of Petroleum Activities.

The Right Holder is responsible for the maintenance, registration, and Data Processing and submitting of reports.

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Article 109. Facilities Foundations and Structures:

Facilities and their elements shall:

- a) Perform satisfactorily during normal conditions in view of, among other factors, deteriorations, displacements, foundations and vibrations;
- b) Have adequate safety mechanisms so as to resist accidents caused by their wearing out;
- c) Safely resist all potential deformation events such as ruptures or large inelastic displacements;
- d) Have adequate safety mechanisms against situations of potential risks or accidents; and
- e) In case of floating structures, to safely resist free drifting, capsizing and sinking.

The structural system, including its elements and components, should be conceived in order to:

- a) Show optimum ductile properties and minor susceptibility to local damage;
- b) Represent a uniform distribution of strains;
- c) Resist corrosion and other types of deterioration relative to its function; and
- d) Allow simple monitoring, maintenance and repair activities.

The materials selected for the foundation structures shall be suitable for this purpose and its characteristics shall be documented. During the manufacturing of components and connections, these must be subject to the specifications of the manufacturer, to tests and controls which shall take into account the importance of each component to the safety of the structure. The structure must be protected against potential deteriorations.

Article 110. Corrosion and Erosion Protection:

Due consideration must be given to the necessary measures to protect Facilities and other appurtenant equipment from external and internal corrosion and erosion, as well as temporary protection during their construction.

Systems, equipment and procedures for permanent monitoring of corrosion and erosion shall be developed and installed to ensure safe activities throughout the lifetime of the Facilities and usage of appurtenant equipment.

Article 111. Equipment, Electrical Systems, Instruments and Telecommunications:

Equipment, electrical systems and instrumentation shall be designed and installed so as to reduce explosion risks to a minimum, to avoid personnel accidents, to ensure support to emergency operations and to maintain Production regularity. Equipment, electrical components in, on or as part of Facilities shall comply with the appropriate area classification, as well as with Lebanese and international standards for Petroleum Facilities.

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Instruments for monitoring and registration of Data regarding safety conditions should be connected to a source of power that is not interrupted in cases of emergency.

Facilities shall be equipped with adequate telecommunications systems for ensuring safety, operation in compliance with the Offshore Petroleum Resources Law, and the implementation of remote control shutting systems may be additionally required.

Article 112. Lifting Equipment:

The installation of lifting appliances is mandatory and their operation shall be planned and carried out so as to prevent errors or operational failures from developing into danger or accident situations. The Right Holder shall take, and the Operator shall implement, technical, operational or procedural measures to prevent limit and mitigate hazards and danger in order to reduce and avoid incidents, accident and damage.

The Operator shall on behalf of the Right Holder, systematically carry out a risk analysis to identify the probability and consequences of the occurrence of single or sequential failures during lifting operations and should take into account measures to avoid, reduce and mitigate risks.

Lifting appliances and lifting gear shall be designed, operated and maintained according to Lebanese and internationally recognized standards. The selection of lifting appliances and lifting gear shall take into account the relevant standards and climate conditions.

Prior to the commencement of their operation, lifting appliances and lifting gear shall be examined by a skilled technician who will issue a certificate of compliance, and lifting appliances and lifting gear shall thereafter be examined at least once every twelve months. After each repair or modification, lifting appliances and lifting gears shall be subject to another certification by a skilled technician.

The Operator shall ensure that personnel engaged in lifting operations have the necessary qualifications for the safe operation of equipment.

Article 113. Physical Working Environment:

During design phase of the Facilities, a working environment program shall be prepared outlining the manner in which safety objectives and working environment requirements will be achieved. Safety officers and staff will have an active role in the preparation of the program.

Work and recreation areas, access to Facilities, transport routes and lifting appliances shall be designed so that work operations and the moving of personnel, equipment and goods may be carried out in a logical and satisfactory manner.

Workplaces, equipment and work operations shall be organized in order to enable personnel to safely perform their work. This entails that:

- a) Workloads shall be planned in order to enable personnel to achieve, on an individual basis, reasonable effectiveness of their work efforts;
- b) Personnel shall not be subject to adverse conditions which may result in injury, sickness or disease;

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c) Workplaces and equipment shall be conceived and organized so as to enable a correct attitude and work conditions on an individual basis;

d) Equipment for monitoring, control and supervision of Production processes, technical appliances or work operations, shall be designed and organized in accordance with ergonomic principles deemed adequate for a proper man-machine interaction; and

e) Hand tools and work equipment in use shall be appropriate for preventing injuries, sickness and diseases to personnel.

Safety appliances for machinery shall be designed so that personnel are safeguarded from contact with dangerous equipment parts or being injured during their operation.

The workplace shall possess lighting conditions capable of ensuring that the work can be carried out in a safe and prudent manner in such aspects as:

a) Lighting shall contribute towards emphasizing terrain discrepancies, physical objects, and protruding parts; and

b) Lighting poles shall be designed and positioned so as to prevent accumulation of dust and corrosion, as well as to allow that their maintenance and change of light sources is carried out in a safe manner.

Living quarters and recreational areas shall be designed, equipped and located in order to provide acceptable safety, environment, and health standards. The Facilities should be conceived so as to enable the separation of living quarters and recreational areas from drilling and auxiliary systems and Production Facilities. A description of the needs of personnel shall be documented and the capacity of living quarters and recreational areas should be projected so as to comply with said description. Living quarters and recreational areas shall possess adequate capacities and facilities.

Article 114. Safety Measures during Construction:

Preferential treatment shall be given to the use of materials which are considered harmless either in isolated use or in combination with other materials or gaseous components.

The properties of materials shall be evaluated with regard to emissions of dusts, gases and vapours capable of causing adverse health effects, as well as to other effects on the working environment conditions and the wellbeing of personnel. The evaluation shall also comprise the exposure properties of materials to fires or excessive heat.

Plans shall be implemented in order to ensure that the equipment made available to personnel is suitable for the safe performance of their work.

The danger of chemical exposure capable of causing adverse health effects, such as the storage, use, handling and disposal of chemicals, and in work operations or processes which produce chemical substances shall be reduced to a minimum. The danger of accidents, sickness or illnesses caused by long term exposure to chemicals shall equally be reduced to a minimum.

Personnel exposure to noise shall be minimized to the extent possible mainly by means of the use of adequate technology such as:

- a) Noise levels within the Facilities' areas shall comply with the possible levels that may be attained with the application of current technological standards;
- b) No employee shall endure exposure to noise levels which may harm human hearing; and
- c) Warning signs shall be posted at the entrance of divisions or zones with a noise level harmful to hearing.

Vibration in the form of whole-body vibration and hand-arm vibration shall be avoided to the extent possible.

Preventive measures shall be defined for their implementation in weather conditions which justify the restriction or suspension of work when such is performed in the open air. The conditions which require the closing or abandonment of Facilities shall also be defined.

Safety signs shall be posted in accordance with no less than internationally accepted standards at the entrance of divisions and areas close to equipment capable of causing injuries or harmful health effects to personnel.

Article 115. Design of Transportation and Storage Facilities and Systems:

The design of a Transportation and storage Facilities or system of such Facilities shall be sufficiently detailed so as to demonstrate that the integrity and service ability required will be secured during the design lifetime of the system. This entails that:

- a) Representative values for loads and system resistance in consideration thereof shall be selected in accordance with sound engineering practice;
- b) Analysis methods may be based on analytical, numerical or empirical models, or in a combination of all of these methods;
- c) Safety standards based on the limited capacity of the design may be implemented if all the essential utility and serviceability principles are complied with; and
- d) All relevant sources of insecurity of loads and of resistance thereto shall be considered and sufficient statistical Data shall be made available for adequate assessment of these uncertainties.

The requirements for the operation and maintenance of the Transportation and storage Facilities or system of Facilities shall be implemented and documented so as to lay the outline for the design and preparation of the operating and maintenance procedures.

During the design phase, the conception of the Transportation and storage Facilities or loads system shall identify and take into account loads which may cause, or contribute towards, damages or inoperability of the Systems. Loads shall be classified as operable, environmental, construction or accidental.

Concept and operation of a Transportation and storage Facility or system of Facilities that crosses an international border and enters neighbouring jurisdictions shall be coordinated with the authorized parties of such jurisdictions, for which purpose their regulations shall also be taken into account.

The Transportation and storage Facilities or system of Facilities shall be equipped with sending and receiving appliances for internal inspections and maintenance of equipment, and shall allow the use of mechanical appliances, and a control system of leaks shall be implemented.

Article 116. Safety of Transportation and Storage Systems:

Transportation and storage Facilities or system of Facilities shall meet Lebanese and international requirements for the protection of public safety, environment and personnel working on or near the system.

The execution of a safety study involving identification of potential hazards caused by human activity alongside Transportation and storage Facilities is mandatory and for which purpose the following rules shall be applicable:

- a) Safety zones, and the restrictions to be implemented therein in respect of construction, commerce, transit and use, shall be established in accordance with international law obligations;
- b) The arrangement for the location of the Transportation and storage Facilities, and appurtenant equipment in respect of population density and concentration shall be made in accordance with recognized standards;
- c) The dimensions of each segment of the Transportation and storage Facilities of Facilities shall be measured, and based on this arrangement and on the performed risk analyses, be compliant with the recognized standards; and
- d) The Petroleum Administration may, based on the information provided in the plan for Development and Production or the plan for construction, placement and operation of a Transportation or storage Facility, stipulate which standards shall be applicable.

Based on the performed safety studies, Transportation and storage systems shall be divided into sections through the use of valve stations. Emergency shutdown valves shall also be operated by remote control.

The location of compressing and pumping stations shall be chosen so as to minimize the consequences of potential accidents with regard to the Transportation and storage Facilities and surrounding areas.

Notwithstanding the existence of justifiable reasons, administrative areas and living quarters should to the extent possible, be located outside the safety zone. When buildings and structures are located within the safety zone, they must be designed so as to offer adequate protection of personnel during situations involving risks or until such personnel may be evacuated onto a safe area.

Article 117. Facility Location and Pipeline Route Survey:

The route of pipelines, cables or sites, and other Facilities or equipment comprised by a Transportation system to be used for Petroleum Activities, shall be surveyed prior to construction, installation or placement.

The survey of the location for the placement of a Facility or potential route of a Transportation system shall be subject to approval of the Minister based on the opinion of the Petroleum Administration.

In the evaluation and selection of the Transportation system route, the Petroleum Administration shall take the following criteria into account:

- a) Public and operational safety;
- b) The environmental impact during Development and within the expected lifetime of the Transportation system;
- c) The environmental impact and safety aspects of potential for discharge or leakage of fluids, emission or discharge of gaseous components;
- d) Other properties and infrastructure;
- e) Third party activities;
- f) Geo-technical and hydrographical conditions;
- g) Construction, operations and maintenance requirements;
- h) Local and national requirements; and
- i) Future Exploration.

The construction, installation, placement or operation of large scale Transportation and storage Facilities shall be avoided in residential areas or in areas of considerable human activity.

Article 118. Installation and Operation of Transportation and Storage Systems:

When part of a Transportation system crosses another Transportation or storage system, umbilicals, cables or wires of any other kind, then interested parties shall by way of agreement create the required procedural rules related to construction, operation, maintenance of the Facilities involved and for proper communication between Operators. Such procedural rules shall subsequently be submitted to the Petroleum Administration.

Notwithstanding other acceptable technical solutions, pipeline, umbilicals and other components of a Transportation or storage Facility or system of Facilities shall be placed in a safe, environmentally acceptable and otherwise protected manner in order to prevent damage, and to reduce or prevent interference with other activities. The depth shall be such that the Transportation system cannot be damaged by the activities generally allowed, or specifically permitted within a safety zone. The

sections which are not underground shall be secured as far as possible to prevent access by non-authorized personnel.

Authorities regulating other activities carried out in an area pursuant to a Petroleum Right shall be consulted to establish adequate and coordinated requirements to Petroleum Activities, Right Holders, Facilities or entities engaged in other activities so as to reduce or prevent possible interferences.

Pressure resistance, leakage and emissions testing must be carried out in accordance with specific procedures defined or accepted by the Petroleum Administration prior to operating the Transportation or storage system. The connections which cannot be pressure tested shall be subject to special control measures defined or accepted by the Petroleum Administration.

A Transportation or storage system shall be monitored by two independent control and verification systems:

- a) An integrated control system; and
- b) A protection and alarm system.

Article 119. Requirements for Processing and Auxiliary Facilities:

Processing and auxiliary systems shall be designed and located in such way that the risk to personnel, property, environment and assets and financial interests does not exceed the degree of risk set forth by the safety objectives.

In the design of Processing and auxiliary systems, the qualifications of personnel, the suitability of the operation and the planned maintenance shall be taken into account. Instrumentation and control equipment for Processing and auxiliary systems shall be highly reliable.

Prior to the selection of design solution for Processing and auxiliary systems, a plan shall be established that takes into account the Offshore Petroleum Resources Law and in particular, *inter alia*, the following features:

- a) Regularity of operations going on;
- b) The degree of qualifications of personnel;
- c) Maintenance strategy;
- d) Changes to operating conditions;
- e) Potential changes to current operating conditions and future needs;
- f) Personnel qualification requirements; and
- g) Environmental issues.

The selection of materials for Processing and auxiliary systems shall take into account the following features:

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a) The loads and environmental conditions that they may be exposed to during construction, installation, maintenance and operation; and

b) Potential changes in operating conditions.

The principles behind the selection of critical materials shall be documented. When new materials are introduced, they shall be subject to examinations, calculations and tests in order to ensure that these comply with the applicable safety criteria.

Flow and debit levels and the system capacity shall be ascertained through consideration of the reaction times, capacity and reliability of control systems, and operational aspects such as vibration, noise levels, pressure oscillations, and water related effects.

When Processing and auxiliary systems are fixed on mobile infrastructures, special consideration shall be given to the types of movement of the Facility in order to ensure that safe and efficient operation is achieved under the specified operational conditions.

The storage tanks for extracted formation and drained water shall be equipped with:

a) one closed drainage system for extracted formation water;

b) one open drainage system for areas which stand the risk of explosion; and

c) one open drainage system for non-hazardous areas.

Power systems shall have sufficient capacity to supply power to all simultaneous consumers on the Facility. The start-up of the main power consumers shall be possible without the main power system becoming overloaded and creating the risk of shutdown, for which purpose the quantity of simultaneous consumers shall be taken into account.

Article 120. Safety of Processing and Auxiliary Facilities:

Processing and auxiliary systems arrangements and area classification shall be considered in conjunction with each other. All machinery and auxiliary equipment must conform to the area classification in which the equipment is to be installed.

Pressure chambers with foundations, rotating machinery, piping systems, including supporting structures and appliances of penetration into zones containing Petroleum, or other potentially dangerous means, and in accident situations, shall be resistant to fire and to exploding loads. Processing and auxiliary systems be equipped with pressure control devices capable of ensuring protection against abnormal pressure situations. Drainage devices shall be designed so as to avoid accidental outflow of Petroleum.

Area classification and results from risk analyses shall be included in the specifications of ventilation systems and these shall ensure that the concentration of smoke, particles, steam and gaseous components is kept below specified limit values. The ventilation system shall be designed so as to ensure its capabilities of cooling and heating the equipment, as well as to guarantee greater ventilation to areas containing sources of ignition and which bear the risk of gas ingress. In the case of modification to Processing and auxiliary systems, risk analyses shall be updated and measures

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shall be carried out so as to maintain or improve the original ventilation conditions. Areas with natural ventilation shall have sufficient air circulation so as to ensure that gas concentrations and pollution levels are kept within specified limit values. Closed and partly closed spaces with natural ventilation shall comply with recognized standards with regard to the size of openings in walls, floors and ceilings. In areas without sufficient natural ventilation, mechanical ventilation shall be assured in the projected form of motorized fans and other spark-preventing accessories in the ventilation facilities.

Boilers with a heating unit shall comply with the requirements stipulated in recognized technical standards. The heating unit for boilers shall be supplied with combustion air from non-hazardous areas. Exhaust gases shall be transported onto a non-hazardous area and exhaust gas ducts shall be designed so as to prevent possible combustion sparks from becoming a source of ignition. In the case of offshore Facilities, the exhaust gas shall be transported out of the Facility so as not to be of inconvenience to people or cause hazardous situations for helicopter traffic or supply vessels.

Article 121. Design of Processing Systems and Facilities:

In areas bearing the risk of hydrate or ice formation, the Processing systems shall be equipped with appliances capable of injecting glycol or methanol or other similar measures. The risk of self-ignition or of pyrolysis shall be assessed in connection with the selection of materials, with inspection and maintenance procedures, and all components shall be fitted with thermal insulation.

Separation appliances shall have sufficient capacity to separate the components of the well stream. Whilst designing separation appliances, the consequences of changes in the well stream in the course of time shall be projected. Separation appliances shall be designed to ensure equipment located downstream is not negatively affected. The separation appliances shall be capable of and be capable of removing and draining sands separating Petroleum from formation water and ensure their purity.

As a general rule, pressurized containers and containers with normal atmospheric pressure shall:

- a) Be designed and used in accordance with Lebanese law and relevant applicable internationally accepted international standards;
- b) When containing Petroleum, be fitted with two separate devices for protection against significant pressure;
- c) Be designed so that breakdown of, or damage to, internal equipment do not affect significant pressure protection devices;
- d) Be equipped with pressure and vacuum valves of sufficient capacity; and
- e) Endure the installation of equipment in their interior without such undertakings causing any deformation or damage thereto.

Control and maintenance conditions of containers shall be defined during the design and construction phases.

Piping shall be consistent with the requirements stipulated by Lebanese law, and when relevant, applicable internationally accepted standards. Loads mentioned in those standards and loads caused

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by abnormal conditions, such as water effects, shall equally be taken into account. The following shall be observed in the analyses of load effects:

- a) The loads transferred to associated equipment shall be considered;
- b) Special consideration shall be given to piping subject to great oscillations, deformations and oscillation of Facilities under specified environmental conditions; and
- c) The control and maintenance conditions shall be set out during the design and construction phases.

In accordance with Lebanese law and relevant applicable internationally accepted standards, mechanical valves and actuators shall be designed and produced so as to withstand the loads to which they may be exposed to. Mechanical valves and actuators that are part of an emergency shutdown system must be able to resist fire and explosion of loads to which they may be exposed to. Valves with great significance to safety shall be tested in accordance with established procedures and with the corresponding test program, including operating, leaks, and spills tests.

Article 122. Design of Auxiliary Facilities:

Rotating compressors shall be fitted with the necessary surge control equipment and necessary pressure relief. Piston compressors shall be fitted with necessary equipment to control and reduce the variation of the pressure pulsation. Compressors with a sealed oil arrangement shall have effective degassing equipment and must be protected from the system of sealing oil until the latter is depressurized.

Liquid separators shall:

- a) Ensure that drainage of liquid take place in a safe and prudent manner;
- b) Protect the compression unit;
- c) Be equipped with mechanisms capable of shutting down the compression unit in the event of an abnormally increase of fluid level;
- d) Possess a discharge valve for drainage that automatically closes in the event of an abnormal decrease of fluid level; and
- e) Be capable of, in all operating conditions, to efficiently collect into the compressors the liquid drops and the liquid freed from the Petroleum flow.

Facilities making use of Petroleum as fuel shall be arranged in order for the best possible operational regularity is achieved, for the supply of fuel in sufficient quantities, and shall be compliant with specified pressure, temperature and specified pollution limits. Liquid separators shall be equipped so that Facilities using Petroleum as fuel is shut down in the event of an abnormal increase fluid level. In the event of an abnormal decrease fluid level, the drainage discharge valve shall be closed automatically.

Pneumatic systems for providing air to working instruments shall be designed in accordance with recognized technical standards for vessels, pipes and compressors. Limit values for dew point, purity,

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pressure variations and temperature of the air shall be defined. The systems shall have adequate compressor capacity to ensure stable operating conditions. The systems shall equally be equipped so as to comply with the specified air values.

Inert gas Facilities shall be designed in accordance with recognized technical standards for vessels, crafts, pipes and compressors, including standards for the transport of gas containing vessels. The selection of the location of inert gas equipment or Facility shall especially take into account the consequences of potential leaks, emissions and discharges, and instrumentation for its detection. Specific measures shall be taken to protect structures that may be cooled down by leakage from vessels or crafts containing inert gas in liquid form. Hoses and couplings used for liquid inert gas must be suitable for this purpose and shall be designed and marked so not be confused with air couplings or those of another nature.

Chemical using Facilities shall be capable of adequately receiving, storing and distributing chemicals. Chemical using Facilities shall, to the extent possible, have fixed storage for storage tanks and piping. The location of such Facilities shall take into account personnel safety, transfer operations from tanks used for transport or supply vessels, and the risk of fire and explosion. Where piping is connected to Facilities containing Petroleum or systems under high pressure, check valves shall be fitted as close to the injection point as possible.

Rotating machinery shall comply with law and relevant applicable internationally accepted standards. In the selection of rotating machinery consideration shall, inter alia, be given to reliability, energy economy, ease of operation and maintenance, previous experience with the machinery, and new technology.

Article 123. General Provisions on Safety Systems:

Facilities shall be equipped with adequate safety systems and designed so as to avoid that potential defects or failures endanger people, the environment or assets and financial interests.

Safety systems shall include, among others, the following devices:

- a) Fire alarm;
- b) Fire and evacuation alarm;
- c) Emergency lighting;
- d) Safety shut-down systems;
- e) Systems of safety during operations;
- f) Systems of control during operations;
- g) Gas leakage detection system;
- h) Emergency power system; and
- i) Fire extinguishers.

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The safety systems shall be operational at all times, be subject to regular maintenance capable of verifying if same maintain individual operational capability, and be designed and protected so as to retain their operational capability for the required period of time during an accident. Systems and components shall resist the environmental loads to which they may be exposed.

Article 124. Fire and Gas Detection Systems:

Systems capable of detecting fire or inflammable and noxious gases shall be installed in areas of the Facility where the occurrence of an accidental risk of fire, or of gas leak or discharge has been identified.

The systems shall ensure a rapid and reliable detection of a fire and of a leak or discharge of gas, trigger the corresponding alarm, indicate the location of the accident, whether it pertains to a real or potential fire, as well as in the case of a gas leak or discharge. Parallel to triggering the alarm, measures to prevent or to limit the consequences of fire and gas leak or discharge shall be implemented automatically.

The systems identified herein shall:

- a) Be independent of other systems and shall not be capable of being negatively influenced by failure in other systems;
- b) Include components capable of withstanding fixed loads so that their operational capability is maintained for a certain period of time; and
- c) Be ready to permit their control, maintenance, testing and modifications.

Facilities, workspaces, recreational and living quarters involved in or exposed to Petroleum Activities shall be equipped with highly reliable warning systems for the events of a fire and the need to evacuate.

The activation of the fire alarm system shall be possible to effect from the control centre and, if possible, from other relevant positions. The activation of the evacuation alarm system shall be possible to effect from the radio room or from the control centre. Manual activation of fire-fighting systems shall set off the fire alarm.

Article 125. Processing Control and Safety Systems:

Facilities with a Processing unit shall be equipped with a reliable control system that provides safe control and regulation of the Processing units and auxiliary systems.

Components and equipment incorporated in the system shall be suitable for the loads to which they may be exposed to.

Facilities equipped with or connected to Processing units shall be fitted with a Processing safety system. The system shall be highly reliable, capable of detecting abnormal operating conditions which may entail danger and of preventing abnormal conditions from developing into hazardous situations.

The system shall be conceived to operate independently of other systems with the same level of safety of other systems. Emergency shutdown valves may be used as the Processing safety system valves.

Components incorporated in the Processing safety system shall be suitable for the loads to which they may be exposed to.

Sensors activating shutdown functions shall give a warning signal when activated.

Appropriate testing of the Processing safety systems shall be possible without interrupting operations.

Block valves incorporated in the system shall be fixed in the correct position.

Article 126. Exhaust Systems:

Exhaust systems shall be installed when it is necessary to eliminate inflammable and noxious gases from the Facility. These systems may be manually activated at a safe distance and at one which guarantees personnel, Facility and equipment protection.

Activation of the exhaust system shall ensure gas discharge onto a safe location and quick depressurization of the equipment.

The system shall be conceived so that exhaustion does not cause injury to personnel or damage to the environment or to assets and financial interests.

The condition of the components of the exhaust system shall be monitored. The system shall be conceived so that maintenance and functional testing can be expediently carried out without interrupting operations.

Article 127. Emergency Power, Lighting and Shutdown Systems:

Facilities shall be equipped with a reliable emergency power system which shall be independent from other power supplying sources and provide sufficient power to safety systems and to other vital equipment for the necessary period of time in the event of failure of the main power system.

Uninterrupted power supply to emergency circuits shall be ensured during changeover from the main power system to the emergency power system.

The systems' principle engines shall have as few potential interruptions as possible so as to ensure its continuous operation.

The system shall be arranged and protected so as to remain operative in the event of the occurrence of an accident and testing shall be possible without interrupting operations.

Facilities with equipment containing Petroleum shall have a highly reliable emergency shutdown system, which shall prevent or limit the consequences of leakage and shall eliminate potential ignition sources.

The Processing unit shall have sectionalisation valves connected to the system dividing it into sections so that a fire does not exceed the resistance capability of isolated sections.

Activating the emergency shutdown system shall ensure the safest possible condition for the Facility and its equipment. Manual emergency shutdown devices shall be strategically located, well demarcated and protected against accidental activation. The system should be able of being activated manually or by other means.

Components incorporated in the system shall be independent or complementary to other systems. Emergency shutdown valves may also be used as Processing safety valves. The emergency shutdown system shall not be affected by failures in other systems. The valves, when installed, shall have the function of emergency shutdown valves, for which purpose the following are of greater importance:

- a) Valves in Production and injection tubing or designated as Sub Surface Safety Valves;
- b) Valves in Production and injection wing or wing valve;
- c) Main automatic valve;
- d) Valves in the Christmas tree related to the injection of chemicals or gas lifting; and
- e) Valves of the isolation into sections process.

Components incorporated in the system shall be designed for the loads to which they may be exposed to. Appropriate testing of the systems shall be possible without interrupting operations.

All accessible emergency shutdown valves shall be conceived so as to be easily accessible and equipped with a position indicator. The entire information on the status of every executed action shall be automatically transferred to the control centre.

The installation of emergency shutdown valves shall be effected in a safe and controlled manner.

Work and residential facilities shall be equipped with emergency lighting capable of ensuring sufficient lighting within the facilities in danger and accident events.

Chapter 9 Health, Safety and the Environment

Article 128. General Requirements to Health, Safety and the Environment:

The Right Holder shall ensure that the Operator complies with the requirements related to health, safety and the protection of the environment stipulated by applicable law, best Petroleum industry practices and when relevant, in accordance with applicable standards generally accepted from time to time in the international Petroleum industry and which are not unreasonable.

The Right Holder shall ensure that anyone carrying out work on behalf of the Right Holder, personally, through employees, contractors or subcontractors, complies with the regulatory requirements related to health, safety and the protection of the environment.

The Right Holder shall ensure that the Operator executes the Petroleum Activities in a prudent manner, based on the individual and overall assessment of all factors of relevance for planning and implementation of the Petroleum Activities with regard to health, safety and the protection of the environment. The Operator shall in the planning and execution of Petroleum Activities give due consideration to the specific nature of the activities, local conditions and the requirements following from the nature of the operations conducted.

The Right Holder and the Operator shall ensure that a high level of health, safety and protection of the environment is established, continuously developed and maintained.

Harm, or the potential harm, to people, property and the environment shall be prevented, limited or mitigated.

The Operator shall make preferential use of materials and chemicals which are least hazardous or damaging offering improved safety elements, and thus minimise the risks to the health and safety of personnel, to the environment and to property. The recycling of materials and chemicals shall be duly taken into account when planning and be implemented whenever possible without entailing excessive cost.

The Right Holder and the Operator shall ensure that the employees and their elected representatives are given the opportunity to participate in matters of importance for the health, working environment and safety of personnel and Facilities in all phases of the Petroleum Activities.

Article 129. Health and Safety Plan:

The Right Holder shall ensure and the Operator shall prepare and regularly update and develop a health and safety plan, comprising the management, policies and procedures of health and safety in relation to the Petroleum Activities pursuant to these Regulations and the Offshore Petroleum Resources Law, including, but not limited to:

- a) Authorities and command structure of the health and safety organisation;
- b) Facilities and equipment;
- c) Operations and qualifications;
- d) Risk assessment;
- e) Monitoring, testing and inspection; and
- f) The emergency response plan.

Article 130. Risk and Safety Analysis:

The Right Holder and the Operator shall endeavour to continuously reduce the risk of hazards or harm to people, property and the environment. With the aim of reducing risk, the Right Holder shall ensure that the Operator or anyone carrying out work on the Right Holder's behalf, select the technical, operational or organisational solutions that, according to an individual and an overall evaluation of the potential harm of present and future use, offer the best results, provided that the costs are not disproportionate to the risk reduction achieved.

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The Right Holder shall establish safety objectives and tolerance criteria for risks and carry out an appropriate risk analysis in accordance with these Regulations.

Risk and safety analyses shall be made and used as the basis for implementing preventive measures of injuries and loss of human lives as a result of work related accidents or other types of accidents.

The employees shall be informed of the safety and health related work regulations, as well as of the necessary risk reducing measures.

The Operator shall ensure that work related equipment and Facilities placed at the disposal of personnel are suitable for the work to be carried out within a safe and secure environment.

Article 131. Testing, Inspection and Reporting of Compliance with Safety Requirements:

The Operator shall, prior to operating the Facilities, undertake testing, inspections and checks so as to ascertain that the safety requirements established in these Regulations or in other applicable law are complied with. The Operator shall prepare a report comprising documentation on the assessment of the activities, the results of any undertaken tests, inspections and checks, and an evaluation of such results, which shall be disclosed to the Petroleum Administration for consideration.

The Operator shall develop and implement a programme for periodical testing and inspection, for the purpose of determining whether the Facilities are in a technically acceptable and safe condition, and to proceed with restorations and modifications thereto so as to ensure that the planned safety levels are being complied with during the operation of the Facilities. Each inspection and restoration operation shall be documented and disclosed to the Petroleum Administration.

Article 132. Safety Procedures for Changes, Modifications and Repair of Damage:

The Operator shall ensure that changes and modifications to Facilities and other equipment and the repair of damages, are performed in accordance with specific procedures capable of safeguarding safety levels.

Article 133. Registration, Follow-up and Reporting of Incidents and Damage:

The Right Holder shall ensure and the Operator shall develop a system for the registration, evaluation and follow-up of any accident, damage, injury or any other significant occurrence in terms of safety.

The Operator shall immediately report injuries to personnel, significant material damage, hazardous incidents, as well as the results of the enquiries to such incidents, to the Petroleum Administration.

Article 134. Protection of Working Environment:

The Right holder shall ensure, and the Operator shall promote a high level of safety and establish overall safety and working environment objectives for the specific phases of Petroleum Activities. By working environment is understood the physical configuration of the workplace and its potential hazards, work processes and work performance.

The Right Holder shall ensure, and the Operator shall define specific working environment objectives for the various phases of Petroleum Activities, and these objectives must be compatible with the Offshore Petroleum Resources Law and with those of the Right Holders. The specific requirements to the working environment shall be based on the provisions stated in the applicable Law.

The Right Holder shall ensure, and the Operator and its contractors shall establish, safety and working environment requirements for the Petroleum Activities. The Operator shall ensure consistence between its specific requirements and those of its contractors.

The Operator's regulations shall include the identification of the specific safety and work environment requirements for the performance of Petroleum Activities which must comprise the basis for decision making or for reviewing the situations of non-compliance with the established procedures.

The Right Holder shall ensure, and the Operator shall arrange, for a system of safety delegates and a work environment committee for each Facility to be established.

The working environment programme developed in accordance with the provisions of the Offshore Petroleum Resources Law, including these Regulations, shall outline the implementation of the working environment objectives. Dedicated safety personnel such as safety agents and relevant committees' members such as the working environment committee shall have an active role in the preparation and implementation of the working environment programme.

Evaluations shall systematically be carried out in order to verify that the safety and working environment conditions and the results shall be used to reduce risks.

Article 135. Protection of the Health of Personnel:

The Right Holder shall ensure that due consideration is taken of the health of personnel, as well as of the qualification and requirements applicable to medical staff. Health related aspects shall include, inter alia, the following:

- a) Health service;
- b) State of readiness in respect of health care and health services;
- c) Transport of sick and injured personnel;
- d) Hygiene aspects; and
- e) Supply of drinkable water, catering and distribution of food supplies.

An employer shall ensure that the personnel is medically examined on a regular basis in order to detect possible long-term effects arising from working conditions and to implement mitigating, corrective and compensatory measures as appropriate.

Article 136. Hazardous Materials:

Transport, storage and use of hazardous material shall take place in a controlled manner and in accordance with applicable laws, as well as with internationally accepted rules and principles, for which purpose documented rules and procedures of their handling shall be made available.

The danger of exposure to substances involving health hazards shall be minimised as much as possible in the storage, use, handling, and disposal of hazardous substances, as well as in work operations or processes which produce hazardous substances. Substances hazardous to health shall be classified, labelled and identified in accordance with internationally accepted standards.

If hazardous substances are moved into other containers or appliances, it must be ensured that the contents are labelled and clearly identified so as to allow the identification of their contents, which hazards are related to the use of such substances, and for which safety precautions should be taken. Prior to the use of substances hazardous to health, a list of instructions, regarding the applicable safety rules of each of such substances, shall be available at the work site.

Personnel shall wear individual protective equipment against risks which may not be otherwise avoided or limited to an acceptable extent. Use of hazardous substances shall be limited to situations where strictly necessary.

Article 137. Emergency Preparedness:

The Operator shall be prepared to handle accidents and emergencies which may lead to loss of life, injuries, pollution or major damage to property.

The Operator on behalf of Right Holder shall take the necessary measures to prevent or minimise harmful effects of accidents and to restore the environment in accordance with an emergency response plan which shall identify the potential accident events and consequences of such events.

The Operator shall cooperate with other Right Holders and Operators on the elaboration of the emergency response plans. The Minister may under specified circumstances, issue orders and stipulate conditions for such cooperation, including the participation of Right Holders in the financing of the emergency response arrangement.

In case of emergency, the Minister may propose intergovernmental coordination of emergency response measures.

In the event of accidents or emergencies, the Minister may coordinate the measures proposed in the emergency response plan and may:

- a) Order other entities to provide emergency related Facilities, resources and equipment; and
- b) Undertake other measures to obtain the necessary additional resources through other means.

Article 138. Emergency Response Plan:

The Operator shall submit to the Minister, with a copy to the Petroleum Administration, an emergency response plan for handling accidents and hazardous situations which may occur during Petroleum Activities and such plan shall, among other items, contain the following information:

- a) An organisational chart with a precise description of responsibilities, channels of reporting information, and duties of each individual in the event of accidents and dangerous situations;
- b) A list of the equipment intended for use in each accident or in each danger situation with a precise description of the nature and type of equipment, its capacity, location, means of transport, usage and corresponding area of use; and
- c) A programme of action with a precise description of the alarm and communication systems, including means of communication with authorities, of the duties of private parties, of when and on which terms emergency equipment is to be used, of how the operations shall be performed, of the measures for limiting the extent of the damage in case of accident or hazard, and the procedures for winding up the operation.

The plan shall be updated, compatible with national emergency response systems and submitted to the Petroleum Administration and to other relevant authorities and entities.

The Petroleum Administration must be notified prior to the carrying out of emergency exercises and must receive a report on such emergency exercises.

Article 139. Emergency Equipment:

The Petroleum Administration may require the installation of emergency equipment such as fire-fighting equipment, oil barriers, vehicles, standby boats or aircraft's, near or at the Facilities or at major equipment involved in Petroleum Activities and stipulate the operational requirements of each of such equipment under these circumstances.

Article 140. Safety Zones:

Safety zones shall be identified based on studies undertaken by the Operator, and issued through decisions issued by the Minister based on the recommendations of the Petroleum Administration.

Without prejudice to the provisions of the Offshore Petroleum Resources Law, the construction, installation or placement of any Facility, or other installations or structures in the safety zone requires the approval of the Minister based on the opinion of the Petroleum Administration.

Article 141. Protection of the Environment:

In carrying out Petroleum Activities the Right Holder shall:

- a) employ up-to-date techniques, practices and methods of operation for the prevention of environmental damage, the control of waste and the avoidance of unnecessary loss of, or damage to, natural resources;

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b) observe applicable laws and regulations of general application in force from time to time in the Republic of Lebanon for the protection of the environment; and

c) comply strictly with the obligations relating to the protection of the environment prescribed under any approved Exploration and Production Agreement and Development plan.

The Right Holder shall take all necessary and adequate steps to:

a) avoid irremediable environmental damage to the Exploration and Production Agreement Area and adjoining or neighbouring lands and marine areas caused by the Right Holder's Petroleum Activities; and

b) rehabilitate at its own cost all areas that suffer environmental damage as a result of the Petroleum Activities.

All environmental aspects affected by the Petroleum Activities shall be continuously registered for all phases.

The Right Holder shall prevent:

a) Accidents and material damage resultant from its activities and from the Facilities' operation;

b) Damage or risk of damage to third parties' personnel and assets;

c) Damage to animals, vegetation, marine life and monuments;

d) Sea pollution and pollution of water fountains discovered in the course of Petroleum Activities;

e) Air pollution; and

f) Damage to Petroleum bearing strata or Reservoirs.

The Right Holder shall ensure monitoring and implementation of reduction measures to effects of all operational and accidental discharge, handling of waste and pollution emissions into the air, sea, lakes, rivers, and soil. Operational discharges shall be within the limits defined by applicable Lebanese laws.

The Right Holder shall ensure that the Petroleum Administration is informed of the amount of operational and accidental discharges, leakages and waste, and such information shall be made public.

The Right Holder shall cause remedial measures and repair the damage caused to the environment when Petroleum Activities carried out endanger the physical safety of personnel or property, or cause pollution or other environmental damage harmful.

Article 142. Breach of Environmental Standards:

If the Competent Authorities have reasonable grounds to believe that any works, installations or Facilities erected by the Right Holder or any activities carried out by the Right Holder are endangering or may endanger property or are causing pollution or harming wildlife or the environment to a degree which pursuant to the Offshore Petroleum Resources Law and the applicable laws the Competent Authorities considers unacceptable, the Competent Authorities shall, in coordination with the Petroleum Administration, shall immediately notify the Right Holder of the causes of its concern and discuss with the Petroleum Administration to agree on the remedial measures to be taken by the Right Holder.

Said remedial measures shall be undertaken within a reasonable period of time to repair any damage and to prevent further damage to the extent reasonably practicable. If there is a disagreement between the Petroleum Administration and the Right Holder regarding the existence of a problem of the type described in this Article or the remedial action to be taken by the Right Holder, such matter shall be submitted to an independent expert for determination pursuant to the rules stipulated in the relevant Exploration and Production Agreement or Petroleum Licence.

If the Right Holder fails to comply with the terms stipulated in this Article, or contravenes any law on the prevention of environmental damage, and such failure or contravention results in any environmental damage, the Right Holder shall take all necessary and reasonable measures to remedy such failure or contravention and the effects thereof.

Article 143. Protected Areas:

The Right Holder and Petroleum Administration shall notify each other of any environmentally, archaeologically, historically or similarly protected areas or features which might be affected by the Petroleum Activities.

In the event that Petroleum Activities are intended to be conducted within the boundaries of any protected area within the Exploration and Production Agreement Area, the Right Holder shall obtain such additional approvals from the Government, as may be required by applicable law.

Chapter 10 General and Final Provisions**Article 144. Inspection:**

The representatives of relevant Government entities may inspect sites, buildings and Facilities where Petroleum Activities are carried out.

The representatives of the relevant Government entities shall, in coordination with the Petroleum Administration, audit all assets, records and Data kept by the Operator or the Right Holder following a prior notice given to the Operator or the Right Holder within a reasonable time limit.

The relevant Government entities may at their own cost, save for transport and accommodation to be provided by the Right Holder, post duly appointed representatives on site on a permanent basis at metering stations, provided that the number of such appointed representatives shall be as many as may be mutually agreed by the relevant Government entities and the Right Holder.

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The Operator shall assist and provide the necessary means, including such as transport to and from Facilities, vessels, crafts or sites to representatives of relevant Government entities, as well as provide for their stay.

The representatives of relevant Government entities shall fully comply with all applicable health, safety and security procedures established and implemented by the Operator and shall not unnecessarily interfere with the Petroleum Activities.

Except as provided for above, the relevant Government entities may require that direct expenses in connection with audits and inspections of Petroleum Activities shall be covered by the Right Holder, under the specified terms of the relevant Exploration and Production Agreement.

Article 145. Investigation of Incidents or Accidents:

In the event of a serious incident which has led to, or could lead to an accident, the Petroleum Administration shall monitor the actions undertaken by the Right Holder and the Operator in order to restore the situation to its prior condition.

The Petroleum Administration may also elect to have appointed representatives visit the scene of the accident as soon as the situation has been brought under control. The Petroleum Administration shall carry out its own investigations, as well as render assistance to other authorities carrying out investigations on the same matter.

Article 146. Government Representatives Presence During Petroleum Activities:

Government authorities and their representatives must be assisted to be given access to any property, building or Facility in order to monitor or observe Petroleum Activities or participate in meetings as observers.

Expenses incurred in relation to the presence of representatives of relevant Government entities during Petroleum Activities shall be refunded by the Right Holder.

Article 147. General Liability of the Right Holder:

Any obligations of Right Holders towards a third party provided by the Offshore Petroleum Resources Law or pursuant to an Exploration and Production Agreement or Petroleum Right awarded to more than one Right Holder, shall be joint and several, save for in the following cases where liability shall be a several obligation of each the Right Holders:

- a) observe confidentiality obligations set out in an Exploration and Production Agreement, save in respect of their application to anything done or to be done by the designated Operator in his capacity as such;
- b) observe stipulations relating to foreign exchange, save in respect of their application to anything done or to be done by the designated Operator in his capacity as such; and
- c) pay corporate income tax or any other tax assessed and levied on profit, income, revenue or capital gains.

Article 148. Liability for the Infringement of the Rights of Others:

If the Right Holder in the course of Petroleum Activities causes:

- a) limitation in or disturbance of activities and rights, fishing fields or occupied land; or
- b) limitations in aquaculture activities; or
- c) fishing or aquaculture equipment to be moved to less favourable locations as seen from a maritime resource management or commercial point of view;

then the Right Holder shall compensate the physical or legal person affected by such demonstrable disturbance or damage. The same applies with regard to liability and claims if the vessel(s) or craft(s), equipment, catch or harvest of a physical or legal person is polluted, damaged or lost due to Petroleum Activities.

Article 149. Designation of Wells, Reservoirs and Facilities:

The Minister determines well and wellbore designation. Designation takes place the first time at the registration of a well or a wellbore with the Minister based on the opinion of the Petroleum Administration.

The Petroleum Administration proposed to the Minister designations for Data collection and surveys, including track and subsurface surveys. Identification of shallow boreholes shall follow the same system as that which applies to wells and wellbores.

Each well and each Reservoir shall be designated in accordance with the Petroleum Administration's well Data identification system.

A Discovery shall be designated in accordance with the Petroleum Administration's well identification system.

The Minister shall name every Discovery. The naming shall be made according to the applicable principles and guidelines stipulated by the well Data system.

If consent for use of a proper name has been granted in respect of a Discovery or a collection of Discoveries together, this may be dealt with as a field name. If several named Discoveries are comprised in a planned single Development, Production or operation, an application for a new common name shall be submitted by the Operator on behalf of the Right Holders.

If a Discovery located in the near vicinity of an existing field is decided to be developed in connection with the existing field, the Discovery shall preferably be included in the existing field, and the existing field's name shall be used provided that it has the same Right Holders.

The Operator shall, no later when the plan for Development and Production is submitted or an application for exemption in respect of such plan is submitted, propose a name for the project or field. The field name shall be applicable from the time when the name has been approved.

Final decisions on naming shall be made by the Minister.

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Article 150. Format, Packaging and Labelling of Submitted Samples:

All samples shall be clearly marked and in water resistant manner, identifying the relevant Petroleum Right and Operator, date of sampling, name of the person carrying out the sampling, the well designation and the depth, or depth interval, from which the samples have been collected.

Unless otherwise specified by the Petroleum Administration, the following shall apply:

- a) Samples from formation testing and formation test logging shall in addition to the requirements mentioned above, be marked with test number, test type, flow period and type of fluid;
- b) Fluid samples shall be placed in standard aluminium sample containers with screw cap of a type giving the lowest possible loss of hydrocarbons;
- c) Samples of cuttings shall be packed in leak proof bags of good quality or in high density polyethylene containers. Unwashed samples from intervals containing oil based drilling fluid shall be kept in high density polyethylene containers. The overall exterior dimensions of the boxes shall be: height 14 cm, width 27 cm, length 90-110 cm;
- d) Conventional cores shall be delivered in solid and rigid boxes with the following exterior dimensions: height 10 cm, width 40 cm, length 90-110 cm; and
- e) Conventional thin sections shall be delivered as stipulated by the Petroleum Administration.

Article 151. Metering of Extracted Petroleum and Production:

The Right Holder shall meter the well stream, Petroleum extracted, produced, transported and sold, in accordance with guidelines stipulated by the Minister which shall be based on internationally applied and accepted standards and procedures. The respective metering equipment, standards and procedures shall be approved by the Petroleum Administration.

The Petroleum Administration shall examine the equipment and measuring procedures that are used. If the equipment or procedures used are found to be defective or ineffective, the Right Holder shall effect the necessary corrections.

If the Petroleum Administration concludes that the equipment or procedures used have generated an incorrect calculation of the Production levels, this state of affairs shall be considered to be existent since the last examination took place, unless specific reasons warrant the conclusion that such state is prior thereto, or if the Right Holder is able to demonstrate that such defect or insufficiency has lingered for a shorter period of time.

The metering equipment shall be calibrated yearly. Upon calibration of the metering equipment the Right Holder shall provide the Petroleum Administration with all the calibration reports as soon as practicable after completion of the reports.

Article 152. Management of Data from Petroleum Activities:

The Right Holder shall acquire, prepare, store and disclose to the Petroleum Administration the material and documentation necessary for ensuring and proving the safe and effective performance of Petroleum Activities, as described in these Regulations and the relevant Petroleum Rights documents.

The collected or acquired Data, records, logs and other information pertaining to Petroleum Activities shall be submitted to the Petroleum Administration by the methods and in the format decided by the Petroleum Administration, and shall be of good quality and capable of being reproduced.

Material and information which are submitted to, or which otherwise are made available to the Petroleum Administration, shall have unambiguous identification and shall be accompanied by necessary technical information with regard to quality and properties. Metric units of measure in accordance with the International system of metric measuring units shall be used in all documentation.

Article 153. Filing, Storage and Retrieval of Data and Documentation:

The Right Holder shall implement and maintain updated filing and storage systems of documentation and samples necessary for the prudent conduct of Petroleum Activities and allowing systematic access thereto and rapid recovery of Data.

The original documentation and samples collected shall remain in Lebanon and their exportation is subject to the approval of the Minister based on the opinion of the Petroleum Administration.

The Right Holder shall file the documentation mentioned for the duration of the Petroleum Right, unless otherwise agreed by the Petroleum Administration. The original documentation and sample collections shall be delivered to the Petroleum Administration upon the termination of the Petroleum Right.

Article 154. Ownership and Confidentiality of Data:

All Data collected or obtained in relation to or resulting from, Petroleum Activities pursuant to a Petroleum Right shall be the property of the State.

Data, analysis or reports collected or obtained by Right Holder and submitted to the Petroleum Administration pursuant to a Petroleum Right shall be submitted free of charge.

Unless otherwise agreed, all Data collected or obtained in relation to, or resulting from Petroleum Activities shall be kept confidential.

Any person rendering services to or working for the Republic of Lebanon shall, in relation to any information relating to Petroleum Activities disclosed to him in the course of his duties, which for commercial or competition reasons is important to keep confidential:

a) keep such information confidential;

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- b) prevent others from gaining access to, or obtaining knowledge of, such information; and
- c) prevent the use of such information for any other purpose than for which the information is received by the Government entity.

The duty of confidentiality pursuant to the above paragraph also applies after the person in question has terminated his service or work for such Government entity.

Data collected or obtained pursuant to a Reconnaissance license from areas outside of an Area subject to an exclusive Petroleum Right shall be kept confidential for a period of up to five years after the expiry of the Reconnaissance license. Data collected within an Area subject to an exclusive Petroleum Right shall be treated as any other Data collected or obtained in relation to such exclusive Area.

Data collected or obtained from an Area subject to an exclusive Exploration and Production Agreement shall be kept confidential for the duration of the relevant Exploration and Production Agreement.

Data collected or obtained in relation to or resulting from Petroleum Activities pursuant to a Petroleum Right other than a Reconnaissance license, shall be kept confidential for the duration of such Petroleum Right.

Transfer of Data or copies of Data collected or obtained in relation to or resulting from Petroleum Activities or Petroleum Rights, or assignment of rights related to such Data, is subject to the approval of the Minister based on the opinion of the Petroleum Administration, except for the transfer or assignment of such Data or rights, upon prior notice to the Minister with a copy to the Petroleum Administration.

Without prejudice to the provisions of this Article, Government entities may make general public statements regarding the Petroleum Activities conducted pursuant to a Petroleum Right and the probabilities of discovering Petroleum. The Petroleum Administration may also share such Data with other competent Government authorities upon their request. The Right Holder to a Petroleum Right may waive the confidentiality protection provided by the Offshore Petroleum Law.

Article 155. Qualification and Training of Personnel:

All personnel engaged in Petroleum Activities shall possess adequate qualifications and training for the efficient and safe execution of their work.

The Right Holder's shall ensure that Right Holder's personnel and those of its contractors possess adequate qualification and training for the efficient and safe execution of their work Specific criteria shall be established for the identification of relevant tasks with regard to safety and protection of the environment, as well as for the selection of personnel responsible for certifying the project.

The Right Holder shall ensure that all personnel engaged in Petroleum Activities, whether it is the Right Holder's or Operator's own personnel, or those of its contractors, are thoroughly familiar with the facilities, policies and relevant operational procedures. The Right Holder shall equally ensure that such personnel have adequate training and experience in dealing with emergency situations.

The Right Holder and contractor shall give priority to training of Lebanese in order to facilitate the employment of Lebanese at all level of Right Holder's or contractor's organisations.

The Right Holder shall in consultation with the Minister, propose and carry out an effective recruitment and training program for Lebanese personnel for each phase of the Petroleum Activity and at all levels of management, taking into account the safety requirements and the need to maintain reasonable standards of efficiency in the conduct of Petroleum Activities. Such employees may be trained in the Republic of Lebanon or abroad as required by the training programs prepared.

The Right Holder shall equally ensure that all personnel, including contractors' personnel have adequate training and experience in dealing with emergency situations.

Article 156. Training of Public Sector Personnel and Government Support:

The Right Holder and the Operator shall provide training to Government employees involved in the management of Petroleum resources or monitoring of Petroleum Activities and related activities. The same training obligation applies to the Right Holder and Operator with regard to teachers and trainers employed or associated with Lebanese publicly funded institutions.

Each Right Holder shall co-operate with the Minister in giving a mutually agreed number of Government civil servants and personnel associated with Government entities in charge of Petroleum resources management, Petroleum Activity monitoring and control, the opportunity to participate in training activities provided for the employees of the Right Holder or any of its Affiliated Companies.

Article 157. Procurement and Local Content:

Major contracts for the procurement of goods and services for the purpose of Petroleum Activities shall be subject to public tender. The quality, price, delivery and guarantees offered shall be taken into account when evaluating bids and awarding contracts. Major contracts mean any contract that materially or substantially affects the design or functionality of Facilities, the concept or timeline of Development, Production or resource management and depletion policies. Major contracts mean also contracts of substantial value, meaning that the performance or non-performance of the contract may substantially affect the economy of the project or the financial strength of the Right Holder.

The Right Holder shall ensure that the Operator gives preferential treatment to the procurement of Lebanese originating goods and services when such goods and services are internationally competitive with regard to quality, availability, price and performance. Lebanese originating goods and services are those that in substance or measured by value added are predominantly manufactured, constructed or performed in Lebanon, by Lebanese or by an entity owned and controlled by Lebanese.

The public tender for the procurement of goods and services shall abide by the following principles:

a) Invitations for pre-qualification to tender or to submit bids shall be distributed to a reasonable number of suppliers considered or expected to be capable with regard to quality, qualifications and experience to deliver the goods or render the services required;

b) A reasonable time limit shall be provided for the preparation of bids;

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- c) All potential suppliers whether specifically invited to tender or not, shall receive the same invitation specifications;
- d) Specifications, tendering time limits, and terms of delivery must not be complicated to avoid the undue exclusion of competing suppliers;
- e) A certified copy of the list of pre-qualified bidders shall be submitted to the Petroleum Administration for information;
- f) The Petroleum Administration shall be informed of the decision subsequent to the award of major supply contracts.
- g) The information related to the award of a major supply contract shall be provided by the Operator or the Right Holder, and shall include the core components justifying the selection of the supplier.

Article 158. Insurance:

The Right Holder shall contract and maintain all adequate insurance required in respect of Petroleum Activities in accordance with the Offshore Petroleum Resource Law, other applicable Lebanese laws, and such other insurance as the Minister may impose on the Right Holder from time to time. In the event insurance is procured from a jurisdiction other than the Republic of Lebanon, applicable law of such other jurisdiction and regulatory requirements shall apply in addition, but in no way to the detriment of Lebanese regulatory requirements. Insurance coverage contracted by Right Holder shall hold the State harmless from and against all claims resulting from Petroleum Activities or arising out of rights or obligations granted pursuant to a Petroleum Right.

Any insurance required to be effected by the Right Holder may at the Right Holder's discretion and subject to the approval of the Minister, be provided by one or more of the following options:

- a) Insurance through an insurance company wholly owned and controlled by a Right Holder in which case the premiums charged shall be at equivalent coverage and prevailing international insurance market rates for comparable insurance coverage;
- b) A Right Holder utilizing insurance which for the benefit of Petroleum Activities is placed as part of a global insurance coverage, in which case the premiums charged shall be at the rates obtained for such global coverage;
- c) Insurance through the international insurance markets at prevailing rates, provided that:
 - i. an insurance company wholly owned by a Right Holder may participate in any internationally placed insurance or reinsurance; and
 - ii. a Right Holder shall have the option to issue calls for tender and effect all appropriate reinsurance for any insurance placed through insurance companies registered in the Republic of Lebanon.

The Right Holder shall competitively tender all renewable insurance policies placed into the international markets at least once every three (3) years unless otherwise provided by the Exploration and Production Agreement, and approved by the Minister.

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Article 159. Interest on Overdue Payments:

A delay penalty shall be payable on any amount due pursuant to the Offshore Petroleum Resources Law governing Petroleum Activities or Petroleum Rights, and shall be equivalent to the delay penalty paid on withholding tax, according to the Tax Procedures Law.

Payments, delay penalties and their balance shall be settled within fifteen (15) days of final computation of the Royalty for extracted Crude Oil or other Petroleum products. The rule on settlement of payments, delay penalties and their balance shall also apply in cases when the stipulation of value has been the subject to administrative appeal. The time limit for administrative appeal shall be calculated according to applicable Lebanese administrative law.

Article 160. Use of Currency Exchange Rates:

When converting prices, deductibles, costs and expenses invoiced in a foreign currency, the daily average of the Central Bank of Lebanon daily currency exchange rates for sales and purchases shall be used.

Four decimal places shall be used in conversion calculations made according to the first paragraph of this Article.

The final amount after conversion made according to the first and second paragraphs of this Article shall be rounded off to the nearest Lebanese Pound.

Article 161. Revocation or Forced Assignment of a Petroleum Right:

The Council of Ministers, based on the proposal of the Minister based on the opinion of the Petroleum Administration, may decide that the Minister by serving notice on the Right Holder may revoke a Petroleum Right for any reason provided by the Offshore Petroleum Resources Law, including:

- a) A Right Holder is in substantial or repeated breach of the Offshore Petroleum Resources Law, the Exploration and Production Agreement or the decisions pursuant to the above Law or the terms and conditions of the Petroleum Right;
- b) A Right Holder has submitted incorrect information or withheld significant information regarding an application for a Petroleum Right;
- c) A Right Holder fails to comply within a reasonable period of time with any final administrative, court, arbitral or independent expert decision;
- d) Where an order is made or a resolution is passed by a court of competent jurisdiction winding up the affairs of the Right Holder unless the winding up is for the purpose of amalgamation or reorganization and the Minister has been notified of the amalgamation or reorganization, or if without the approval of the Minister, the majority of the shares in the Right Holder are acquired by third parties other than an Affiliated Company, or if the Right Holder applies for an agreement with his creditors or in the event of its bankruptcy.

The Council of Ministers may upon the Minister's proposal based on the opinion of the Petroleum Administration may revoke the entire Petroleum Right only if a breach as provided in the first paragraph of this Article is of an obligation that is joint and several between the Right Holders or all Right Holders are in default as described in paragraph d) of the first paragraph of this Article.

The Council of Ministers may, upon the Minister's proposal based on the opinion of the Petroleum Administration, by notice by the Minister require that a Right Holder that is in breach or has been notified as provided for in the first paragraph of this Article shall assign its participating interest in the Petroleum Right to the other Right Holders participating in the same Petroleum Right.

Where a notice of assignment has been served on a Right Holder, that Right Holder shall forthwith, unconditionally, without consideration, and free from any rights to third parties assign its undivided participating interest in the relevant Petroleum Right as notified to the other Right Holders participating in Petroleum Right proportionate to the interest currently held by the receiving Right Holders. Each of the receiving Right Holders is obliged to accept the assignment. A Right Holder receiving such assigned participation interest is not liable for any obligations of the assigning Right Holder which accrued prior to the assignment, but shall be bound by any decisions made by the competent organs established for the governance of the Petroleum Activities pursuant to the Petroleum Right and contractual obligations stemming from such legitimate decisions.

The Minister shall, based on the opinion of the Petroleum Administration, give not less than ninety (90) days prior notice to a Right Holder of any intention to revoke a Petroleum Right, or intention to serve a notice of assignment stating in detail the alleged breach relied upon by the Government.

The Right Holder shall within thirty (30) days from its receipt of such notice provide any information the Right Holder wishes the Minister to consider prior to making a final decision of revocation or forced assignment.

The Council of Ministers may, upon the Minister's proposal based on the opinion of the Petroleum Administration, may revoke the Petroleum Right forthwith if, within sixty (60) days from Right Holder's receipt of such notice:

- a) The Right Holder has not attempted to remedy or remove such substantial breach as specified in the notice of revocation or assignment; or
- b) It is clear beyond reasonable doubt that such breach as specified in the notice cannot be remedied or removed within the ninety (90) day period and the Right Holder, where it is impossible to cure or remove such breach if requested by the Minister, is unable to pay full compensation to the Government;
- c) The Right Holder has not disputed the notice and commenced for such purpose court or arbitration proceedings pursuant to ninth paragraph of this Article.

Any dispute between the State and the Right Holder as to whether a Petroleum Right may be revoked, whether the requirements of this Article fifth, sixth, or seventh paragraph have been satisfied; or the Right Holder has remedied or removed a ground for revocation or notice of assignment, whether compensation has been paid in respect of grounds for revocation or forced assignment, or the grounds for the service of a notice of assignment are impossible to remedy or remove, may be referred to court or arbitration proceedings.

Where a dispute has been brought before a court or arbitration tribunal, the Petroleum Right may not be revoked or participation interest assignment enforced pursuant to this Article until the matters in dispute have been resolved by final, non-appealable order or by a judgement that is enforceable in Lebanon, and in that event only if revocation or forced assignment is consistent with the order or judgement rendered.

Where the breach of the terms and conditions of an Exploration and Production Agreement relates to a matter in dispute between the Government and a Right Holder which has been referred for determination by an expert pursuant to the Exploration and Production Agreement, a notice served on the Right Holder pursuant to this Article may not rely upon that matter as a reason for the intended revocation or forced assignment of the Exploration and Production Agreement until the expert has determined the matter.

Article 162. Prevention of Corruption:

Any physical or legal person participating in Petroleum Activities shall cooperate with the Government of Lebanon on preventing corruption.

Any legal person participating in Petroleum Activities shall take immediate administrative disciplinary actions and rapid legal measures to prevent, investigate and prosecute in accordance with applicable Lebanese laws and if required other applicable laws, any person suspected of corruption or other deliberate or grossly negligent misuse of resources.

No offer, payment or benefit of any kind, which would or could be construed as an illegal or corrupt practice, shall be made or accepted, either directly or indirectly, as an inducement or reward for any rights granted by the Government under the Offshore Petroleum Resources Law or for acting or making any decision, abstaining from any action or abstaining from making a decision in relation to Petroleum Activities.

The above shall also apply to Affiliated Companies, agents, representatives, sub-contractors or consultants when such offer, gift, payments or benefit violate:

- a) The applicable laws of the Republic of Lebanon;
- b) The laws of the country of formation, registration or principal place of business of a Right Holder or owner of Facilities, or of their Affiliated Companies at their principal place of business;
- c) The principles described in the Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, signed in Paris on December 17, 1997 and the Convention's commentaries; or
- d) The United Nations Convention Against Corruption ratified by Law no. 33 of 16 October 2008.

Article 163. Guidelines and Standards:

The Minister may, based on the opinion of the Petroleum Administration, issue guidelines and establish standards to supplement and implement these Regulations when such are needed for the implantation, monitoring and control pursuant to these Regulations or individually awarded Petroleum Rights. The authority to establish guidelines and define and approve standards shall include such as necessary to enable making relevant Data and other information available to the

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public.

In connection with individual administrative decisions, conditions other than those stipulated by the Lebanese Offshore Petroleum Resources Law, these Regulations and the individual documents awarding or granting Petroleum Rights may be stipulated, when such conditions pursuant to the said law are appropriately linked with the Petroleum Activities to which such special conditions relate.

Article 164. Additional Requirements:

The Petroleum Administration may, after the Minister's approval, and at any time, issue samples of applications regarding all phases of the Petroleum Activities. The Petroleum Administration may also issue additional requirements with respect to Data, information and documents in addition to the samples of applications, Data, information and documents provided for in this Decree.

The Right Holder must comply with all the application samples issued by the Petroleum Administration and with any other samples that may be issued during all the phases of the Petroleum Activities, and submit the Data, information and documents required by the Petroleum Administration at any time,.

Article 165: Entry Into Force:

This Decree shall be published in the Official Gazette and shall enter into force upon its publication.

Enacted by the President of the Republic

Baabda on

The President of the Council of Ministers

The Minister of Finance

The Minister of Energy and Water

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