#### Decree No 34/2015 of 31 December

#### PETROLEUM OPERATIONS REGULATION

#### **CHAPTER I**

#### **GENERAL PROVISIONS**

#### Article 1 (Definitions)

The meaning of the terms used herein is set out in the glossary of the Petroleum Law n.º 21/2014 of 18 August and in the Glossary of Annex "A", which forms an integral part of this Regulation.

### Article 2 (Scope and objectives)

- 1. This Regulation establishes the rules for award of rights to conduct petroleum operations through a concession contract, with a view to ensuring that petroleum operations are undertaken in a systematic way and in conditions that allow broad and coordinated supervision.
- 2. This Regulation governs petroleum operations and any facilities owned or held by a concessionaire or by third parties used in connection with petroleum operations in the scope of Law no 21/2014, of 18 August.

### Article 3 (Powers of the minister that oversees the petroleum sector)

The powers of the Minister who oversees the petroleum sector are to:

- a) Approve reconnaissance concession contracts;
- b) Approve the appointment or change of the operator;
- c) Authorize the flaring of petroleum and its use as fuel for production purposes;
- d) Authorize the transfer of participating interests in the concessionaire companies shares, rights and obligations of the concessionaire in performance of petroleum operations;

- e) Authorize the entry into operation of any facility;
- f) Authorize the delimitation of discovery areas.

#### **CHAPTER II**

#### **CONCESSION CONTRACT**

#### **Section I**

#### **Award of Rights**

### Article 4 (General conditions)

- 1. Petroleum operations are undertaken based on a concession contract, which can be for:
  - a) Reconnaissance;
  - b) Exploration and production;
  - c) Oil and gas pipeline systems, and
  - d) Construction and operation of facilities.
- 2. The concession contract shall provide for the orderly termination of petroleum operations and its decommissioning in terms of an approved decommissioning plan.
- The right to conduct petroleum operations under the Petroleum Law is awarded to a legal person that demonstrates technical competence, experience and financial means adequate and sufficient for their execution and management.
- 4. All concessionaires shall, upon the approval of any plan of development, be registered with the Mozambican Stock Exchange, as per the applicable legislation.
- 5. The concessionaire is responsible to ensure that petroleum operations are undertaken in a prudent manner, in conformity with the applicable law and in accordance with the Petroleum Industry Best Practice, giving due consideration to the safety and health of personnel, environmental protection
- 6. Concession contracts shall be drafted in the Portuguese language.

- 7. The processing of an application for a concession contract is subject to the payment of a fee, under the terms of this Regulation.
- 8. The concession contract and any contract or authorization related to petroleum operations executed by the Government are governed by and construed in accordance with the laws of the Republic of Mozambique.
- 9. Without prejudice to protection of the confidentiality of the strategic and competitive commercial information of petroleum operations, the main executed concession contract is subject to review and visa of the legally competent authority for this purpose, as well as the publication of the main terms of the concession contract.

### Article 5 (Public tender)

- The concession contract to conduct petroleum operations are awarded by means of a public tender, which the procedures of the tender shall be published either in the most widely published newspapers in the country either electronically on the Government website.
- 2. The tender procedures for the award of concession contracts shall include, at least the following:
  - a) The terms and conditions of the tender and those that are negotiable;
  - b) The minimum timeframes for the submission of applications, which should not be less than 3 months in the case of reconnaissance concession contract and 6 months for the remaining concession contracts.
  - c) The model concession contract.
  - 3. The concession contracts to carry out the petroleum operations may also result from simultaneous and direct negotiation in relation to:
    - a) Areas already declared available due to a previous public tender and that have not been granted;
    - Areas declared available as a result of the termination, relinquishment, revocation, abandonment in terms provided in article 22;
    - c) The need to join adjacent areas to a concession contract area when for technical and economic reasons it is justified;

d) A concession contract or an oil or gas pipeline system not included in an approved exploration and production plan of development.

### Article 6 (Data confidentiality)

- 1. Unless otherwise agreed, the data acquired under a reconnaissance concession contract shall be kept confidential during the term of the concession contract, counting from the effective date of the same.
- 2. The reconnaissance data acquired in an exploration and production concession contract area shall be treated like any other related to the same area.
- 3. The data acquired under an exploration and production concession contract shall be kept confidential for a period of five years counting from the date of acquisition or until the concession contract area is relinquished or the rights over the area are revoked or, further, the concession contract terminates.
- 4. The confidentiality referred to in the preceding paragraphs do not apply:
  - a) To the use of such information between the Minister who oversees the petroleum sector and other government entity, or between state entities when communicating, in fulfilling their obligations under the Laws of the Republic of Mozambique;
  - b) If in connection with any legal or arbitration proceedings;
  - c) If in connection with the determination of the concessionaire obligations and responsibilities regarding payments owed to the State.
  - 5. It is not considered disclosure of confidential data whenever it can proved that the data released were already in the public domain.
- 6. Without prejudice to the provisions of the previous paragraph, the Government may make generic statements about petroleum operations which are the object of a concession contract and the probability of petroleum discovery.

#### **Section II**

#### **Applications**

### Article 7 (Award of reconnaissance rights)

- I. The award of reconnaissance rights is made based on an application, addressed to the Minister who oversees the petroleum sector.
- 2. The application, , shall be submitted at the National Petroleum Institute and shall contain, at a minimum, the following information:
  - a) The name, address and nationality of the applicant;
  - b) If the applicant is a foreign legal person, the identification of the applicant's legal representative in Mozambique;
  - c) Description of the applicant's nature, including the relationship with and the identification of the parent company and other affiliated companies, jurisdiction of incorporation and registration, identification, domicile and nationality of the applicant's management members;
  - d) Demonstration of technical competence, experience and financial capacity to undertake or manage petroleum operations;
  - e) The identification of the area applied for, including geographic coordinates and map(s);
  - f) The description of the objectives, the nature and expected length of the activities;
  - g) Technical description of the equipment and methods applied, vehicles, boats and aeroplanes to be used; and
  - h) A proposed business plan.
- 3. Should the application for obtaining the [reconnaissance] right be submitted on behalf of more than one legal entity, the information listed in subparagraphs a) to d) above shall pertain to each applicant.

### Article 8 (Terms of the reconnaissance concession contract)

- 1. A reconnaissance concession contract shall include an activity plan, stating the manner and the timeframes of the work commitments contemplated therein, and shall contain, at least, the following provisions:
  - a) Identification of the parties to the concession contract;

- b) If the applicant is a foreign legal person, that it has legal capacity and statutory headquarters in Mozambique;
- c) Nature and conditions of the applicant's association with other legal persons, if applicable;
- d) Identification of the concession contract area;
- e) Obligations of the parties;
- f) Duration of the reconnaissance activities;
- g) Treatment of confidential information;
- h) Dispute resolution; and
- i) Anti-corruption clause.
- 2. A reconnaissance concession contract may grant the right to conduct the following activities:
  - a) Magnetic and aeromagnetic surveys;
  - b) Gravimetric surveys;
  - c) Seismic surveys;
  - d) Geothermic circulation measurements
  - e) Radiometric measurements;
  - f) Geochemical surveys;
  - g) Soil sampling of the area;
  - h) Drilling for calibration purposes to a depth not greater than one hundred (100) meters; and
  - i) Other connected activities deemed relevant.

### Article 9 (Award of exploration and production rights)

- 1. The award of exploration and production rights is made by means of an application, addressed to the Minister who oversees the petroleum sector.
- 2. The application shall be delivered to the National Petroleum Institute and shall contain, at least, the following information:
  - a) Name, address, and nationality of the applicant;
  - b) If the applicant is a foreign legal person, the identification of the applicant's legal representative in Mozambique;
  - c) Description of the applicant's nature, including the relationship with and the identification of the parent company and other affiliated incorporation companies, iurisdiction of and registration, identification, domicile and nationality the applicant's of management members;

- d) If the applicant is an association of legal persons, the nature and conditions of that association;
- e) Applicant's experience in the Petroleum Industry, particularly in the field of drilling, production and transportation of petroleum in circumstances similar to those in which it intends to carry out activities in the area being applied for, as well as in the field of production of petroleum, refining and marketing activities, including information on the sales activities of the applicant or of its respective affiliates and other market access conditions;
- f) Description of the applicant's technical and operating skills, including its exploration, development and production capabilities;
- g) Description of the organization and technical resources which the applicant will have available in Mozambique, as well as in any other location, for carrying out the activities in the areas which are covered by the application;
- h) The applicant's financial standing, including the value of its equity capital, shareholding structure and financial documentation, including its last three annual reports and audited accounts as well as those of its respective parent company, if applicable;
- i) Identification of areas object of reconnaissance, including the geographic coordinates and map(s);
- j) Information on the geological and geophysical data on which the application is based, including structural maps of prospective horizons in the area being applied for;
- k) The proposed work program, including the corresponding implementation schedule and other proposals;
- I) Proposals for each one of the negotiable items identified in the proposed concession contract being applied for;
- m)Proposal for the appointment of an operator; and
- n) Proposal for State's participation.
- 3. Any additional information which may be required by the Minister who oversees the petroleum sector.
- 4. When the application for award is submitted on behalf of more than one legal person, the information listed in subparagraphs a) to h) on the preceding paragraph shall pertain to each of the applicants.
- 5. The award of exploration and production rights for coal bed methane will be dealt with in specific regulations.

### Article 10 (Terms of the exploration and production concession contract)

The exploration and production concession contract shall contain, at least, the following provisions:

- a) Identification of the parties to the concession contract;
- b) If the applicant is a foreign legal person, that is has legal capacity and statutory headquarters in Mozambique;
- c) Identification of the area of the concession contract;
- d) Treatment of the subject of the use and enjoyment of land and related rights;
- e) Minimum work commitments;
- f) Duration of the various phases of the petroleum operations;
- g) Treatment of confidential information;
- h) Exploration, development and production rights;
- i) Appointment of the operator;
- j) Third parties access to the oil and gas pipeline systems;
- k) Terms of the State's participation;
- 1) Specific environmental requirements;
- m)Plan for the training of national technicians of the institutions involved in petroleum operations;
- n) The requirements for local content plan;
- o) Dispute resolution; [and]
- p) Anti-corruption clause.

#### Article 11

### (Award of oil or gas pipeline system construction and operation rights)

- The award of oil or gas pipeline system construction and operation rights for transportation of petroleum and natural gas is made by means of an application addressed to the Minister who oversees the petroleum sector.
- 2. The application shall be submitted to the National Petroleum Institute and shall contain, at minimum, the following information:
  - a) The name, address and nationality of the applicant,
  - b) If the applicant is a foreign legal person, the identification of the applicant's legal representative in Mozambique;
  - c) The description of the applicant's nature, including the relationship with and the identification of the parent company and of other

- affiliated companies, jurisdiction of incorporation and registration, and the identification, domicile and nationality of the applicant's management members;
- d) If the applicant is an association of legal persons, the nature and conditions of that association;
- e) The applicant's financial standing, including the value of the respective equity capital, shareholder structure and financial documentation, including its last three annual reports and audited accounts as well as those of its parent company;
- f) Applicant's experience in the Petroleum Industry, especially in petroleum transportation activity in circumstances similar to those in which it intends to carry out activities in the area object of the application;
- g) Description of the organization and technical resources which the applicant will have available in Mozambique, as well as in any other location, for carrying out the activities in the areas which are covered by the application;
- h) Feasibility study of the project to be developed in accordance with the Concession contract,
- i) Environmental impact assessment project and program to carrying out the feasibility study
- j) Proposal of an oil and gas pipeline system plan of development;
- k) Proposal for State's participation;
- Proposal of the financing agreements, award of the right of participation, management and utilization of the oil or gas pipeline system, terms and conditions of Transportation and third parties access;
- m) Any other terms relevant for the concession contract applied for;
- n) A proposal for the appointment of an operator; and
- o) Any other additional information which may be required by the Minister who oversees the petroleum sector;
- 3. Should the application for award of the rights be made under the name of more than one legal person, the information listed in subparagraphs a) to e) of paragraph 2 shall pertain to each of the applicants.

## Article 12 (Terms of oil or gas pipeline system concession contract)

- 1. The oil or gas pipeline system construction and operation concession contract shall contain, at minimum, the following provisions:
  - a) Identification of the parties in the concession contract;

- b) If the applicant is a foreign legal person, that it has legal capacity and statutory headquarters in Mozambique;
- Nature and conditions of the concessionaires' association, whenever it is an association of legal persons;
- d) Specification and route of the oil or gas pipeline system;
- e) Treatment of the subject of use and enjoyment of land;
- f) Right of construction, placement and operation of the oil or gas pipeline system and the respective facilities;
- g) Duration of the concession contract;
- h) Appointment of the operator;
- i) Third parties access to the oil and gas pipeline system;
- j) Terms of the State's participation;
- k) Specific environmental requirements;
- I) Recruitment and the training plan of national technicians of the institutions involved in the petroleum operations;
- m)The terms for local content plan;
- n) Dispute resolution, and
- o) Anti-corruption clause.
- 2. The construction of an oil and gas pipeline system under an exploration and production concession contract shall be part of the approved development plan.

# (Award of Infrastructures construction and operation concession contract)

- 1. The award of infrastructures construction and operation rights for petroleum operations is made by means of an application addressed to the Minister who oversees the petroleum sector.
- 2. The application shall be submitted to the National Petroleum Institute and shall contain, at least, the following information:
  - a) Name, address and nationality of the applicant;
  - If an applicant is a foreign person, the identification of the applicant's legal representative in Mozambique;
  - c) Description of the applicant's nature, including the relationship with and the identification of parent company and other affiliated companies, place of incorporation and registration, and the identification, domicile and nationality of the applicant's management members;

- d) If the applicant is an association of persons, the nature and conditions of that association;
- e) Description of the applicant's financial standing, including the value of the respective equity capital, shareholding structure and financial documentation, its last three annual reports audited accounts as well as those of its parent company;
- f) The applicant's and the proposed operator's experience in the Petroleum Industry, particularly regarding petroleum operations relevant to the activities related to the application in circumstances similar to those in which it wishes to construct or operate;
- g) Demonstration of the applicant's and proposed operator's technical and operating skills, including the exploration and development skills;
- h) Description of the organization and technical resources which the applicant will have available in Mozambique, as well as in any other location, for carrying out the activities in the areas which are covered by the application;
- i) Pre-Feasibility environmental study and program for its implementation;
- j) Proposal for agreements on the financing, property, management and use of infrastructure, terms and conditions for transport and third party access;
- k) Proposal for State's participation;
- Any other relevant terms for the concession contract to be applied for:
- m)Proposal for the appointment of the operator;
- n) Any other additional information that may be required by the Minister who oversees the petroleum sector.
- If the application for the award of the rights is submitted on behalf of more than one legal person, the information and listed in subparagraphs (a) to (h) of the preceding paragraph shall pertain to each of the applicants.

#### Article 14

### (Terms of the Infrastructure construction and operation concession contract)

- 1. The facilities concession contract shall contain, at minimum, the following provisions:
  - a) Identification of the parties to the concession contract;

- b) If the applicant is a foreign legal person, that it has legal capacity and statutory headquarters in Mozambique;
- c) Nature and conditions of the applicant's association, whenever it is an association of legal persons;
- d) Specification, identification and the location in which t is intended to establish the facilities sought;
- e) Terms and conditions associated with the rights of construction and operation of the facilities;
- f) Concessionaires' participation;
- g) Duration of the concession contract;
- h) Terms of the State's participation;
- i) Ownership of the facilities;
- j) Appointment of operator;
- k) Treatment of the subject of the use and enjoyment of land and related rights;
- I) Specific environmental requirements;
- m) Economic terms and other charges;
- n) Procurement of goods and services;
- o) Indemnification, liability and insurance;
- p) Third party access to the facilities;
- q) Recruitment and plan for the training of national technicians of the institutions involved in petroleum operations;
- r) Local content plan
- s) Dispute resolution; and
- t) Anti-corruption clause.
- 2. The construction and operation of the infrastructure under an exploration and production concession contract are part of the approved development plan.

### Article 15 (Posting a bond)

- 1. As a guarantee for the fulfilment of obligations under the concession agreement, the concessionaire shall submit:
  - a) A bank guarantee equivalent to the amount of the minimum work obligations stipulated in the concession contract;
  - b) An unconditional and irrevocable parent company guarantee from an entity acceptable to the Government in respect of the entirety of the obligations of the concessionaire or operator in a concession contract in favour of the Government, in relation to non-contractual obligations,

- beyond the obligations covered by the bank guarantee provided for in the preceding paragraph; and
- c) In the event of non-compliance with minimum work obligations, the National Petroleum Institute shall cash the bank guarantee related to the respective exploration period.
- 2. The parent company guarantee shall only be released after the completion of decommissioning and fulfilment with all relevant obligations arising from the concession contract.

### Article 16 (Transfer of rights)

- 1. All persons that constitute the concessionaire may transfer to another person their rights subject to approval by the Minister who oversees the petroleum sector, on the following terms:
  - a) Rights and obligations or an undivided proportionate part in a concession contract;
  - b) Other direct and indirect interest or participation in the concession contract, including among others, transfer of participating interests in share capital or any legal instrument that grants or may grant decisive control over the person that constitutes the concessionaire or participation in the concession contract; and
  - c) Possession of a right to use a facility.
- 2. No consent is required from the Minister who oversees the petroleum sector, in the case of a concessionaire that is not in material breach of the terms and conditions of the concession contract, for a transfer that is:
  - a) The result of a notice by a concessionaire that is in default of a joint operating agreement, per the terms of a concession contract; or
  - b) Applied for the purpose of effecting procedures for breach under the terms of a joint operating agreement related to petroleum operations.
- 3. Each transfer shall be made by written instrument, by the assignee, in conditions accepted by the same [sic] and that it agrees to be a Person [sic] that constitutes the concessionaire, being thereby bound by the terms and

conditions of the concession contract, including all documents required by administrative decision or applicable law.

#### Article 17 (Fees)

- 1. The Concessionaire is [sic] subject to payment of the fees provided for in Annex B, which forms an integral part of this regulation.
- 2. The Ministers responsible for economy and finance and petroleum sectors have the authority to update the amounts of the fees provided in the schedule referred to in paragraph 1 of this article.
- 3. The proceeds of the fees raised under this regulation are earmarked as follows:
  - a) 60% to the State; and
  - b) 40% to National Institute of Petroleum.

#### **Section III**

#### Duration

### Article 18 (Timeframe)

- 1. An exploration and production concession contract shall be awarded in an exclusivity regime, [and shall be] divided in two periods:
  - a) Exploration period, up to a maximum of 8 (eight) years, divided in sub-periods as provided for in the concession contract;
  - b) Development and production period, up to a maximum of 30 (thirty) years, counting from the date of approval of the corresponding development plan.
- 2. A concession contract for an oil and gas pipeline system or for facilities has a maximum period of 30 (thirty years), counting from the date of approval of the development plan.

3. The construction and operation of facilities requires a license under the applicable legislation.

#### Article 19 (Extension)

- A request for extension of a concession contract shall be made by means of an application addressed to the Minister who oversees the petroleum sector, along with a location map indicating the respective coordinates, [and] the portion of the concession contract area for which the extension is being applied.
- 2. An exploration and production concessionaire preserves his rights over the development and production area until the approval of the development plan, submitted to the Minister who oversees the petroleum sector within the periods foreseen.
- 3. The exploration and production concession contract shall be extended in the following situations:
  - a) If, at the end of the exploration period, the concessionaire is conducting drilling works or testing an exploration well. In this case, the period needed to allow the completion of such work and assessment of the results shall be granted, up to two years; or
  - b) If a discovery has been made during the exploration and production period, if the concessionaire has fulfilled the work commitments and undertakes the commitment to carry out an appraisal program or a commercial appraisal of the discovery. In this case an extension period shall be granted which allows the completion of this work up to a maximum of five (5) years.
- 4. The period of extension in terms of paragraph 3 of this article, ceases with the first of the following events:
  - a) On the date following the date of notification of the commercial discovery by the concessionaire;
  - b) On the date on which the concessionaire voluntarily relinquishes the area of discovery; or
  - c) At the end of the period for which the concessionaire has rights.
- 5. If at the end of the period of exploration and extension granted under paragraphs 1 and 3 of the current article, the concessionaire declares a

- commercial discovery, it shall submit a development plan, within the maximum period of 2 (two) years counting from the date of the declaration of commerciality.
- The request for extension should be presented to the Minister who oversees the petroleum sector, at least three months before the end of the respective period.

### Article 20 (Renewal)

- 1. The renewal may be granted only in exceptional cases, as long as the economic terms offered by the concessionaire appears to be more favorable to the national interest [sic].
- 2. A request for renewal of a concession contract for exploration and production, an oil and gas pipeline system and construction and operation of infrastructure shall be submitted to the Minister who oversees the petroleum sector at least three years before the end of the respective concession contract.

### Article 21 (Relinquishment of the concession contract area)

- 1. When at the request of the concessionaire a sub-period of exploration is extended, at the end of any phase of the exploration period indicated in the exploration and production concession contract, the concessionaire shall relinquish part of the concession contract area, in the following terms:
  - a) At the beginning of the second exploration sub-period, as stipulated in the concession contract, relating to a part of the concession contract area, in order that the retained area, excluding any area already included in a development and production area or in a discovery area, does not exceed fifty percent (50%) of the concession contract area initially granted;
  - b) At the end of the exploration period as defined in the concession contract, relating to the remaining part of the concession contract area, except for any development and production areas or any area for which the exploration period has been extended in the terms of the preceding article and the concession contract.

- 2. For the purpose of this article, a discovery area does not include any area, related with a discovery, in relation to which:
  - a) When a concessionaire has notified the Minister who oversees the petroleum sector that the discovery is not considered as being of potential commercial interest, or not commercial, or is no longer considered to be commercial.
  - b) A development and production area has been previously demarcated.
- 3. It is considered that a concessionaire has relinquished all rights to a discovery area, if the declaration of commerciality has not been submitted by the end of the granted extension period.
- 4. Any area relinquished should be contiguous and defined by meridians and parallels expressed in minutes.

#### Section IV

#### **Extinguishment**

### Article 22 (Causes of extinguishment of concession contracts)

Concession contracts may be extinguished by any of the following causes:

- a) Expiry of the concession contract;
- b) Relinquishment of rights under the concession contract; and
- c) Revocation.

### Article 23 (Relinquishment of rights under the concession contract)

1. The holder of an exploration and production rights may, no later than three months prior to the expiry of the term of the respective concession contract and by means of application addressed to the Minister who oversees the petroleum sector, relinquish its rights over the concession contract area, provided that it fulfilled all of its obligatory work commitments and minimum expenditure obligations, except when dealing with a development and production area.  After the commencement of commercial production, a concessionaire may relinquish its rights over a development and production area by an application addressed to the Minister who oversees the Petroleum sector, at least one year in advance.

### Article 24 (Revocation of the concession contract)

- I. The intention of revoking a concession contract shall be preceded by a ninety (90) days' prior notice, with details of the alleged non-compliance, and shall be communicated to the concessionaire with an acknowledgement of receipt.
- 2. The concessionaire shall, within 30 days counting from the reception of the notice provided for in paragraph 1, correct any situation of non-compliance in which it happens to be.
- 3. The communication of revocation of a concession contract is based on legal grounds, including:
  - a) False or incorrect information, presented in a deliberate or negligent manner, related to any request for a concession contract, authorization or approval of a plan that has been important in the attribution of a right to carry out petroleum operations:
    - Deviation from the purpose of the concession contract;
    - ii. Bankruptcy of the concessionaire;
    - iii. Breach or grave or repeated non-compliance with the law or terms and conditions of the concession contract;
    - iv. Non-compliance by the concessionaire, of any court order, or administrative or arbitral decision or independent expert decision;
    - v. In case there is only one concessionaire and it is subject to a dissolution sentence proffered by the competent authority, except if the dissolution has as its purpose a merger or reorganization, duly notified to the Government, or if the majority of the respective shares are acquired by third parties, except by an Affiliate, without the approval of the Government;
    - vi. Abandonment of the concession area for a period greater than three hundred and sixty-five (360) days; and

- vii. Other causes to be set forth in the concession contract.
- 4. The Government may notify the concessionaire which is in violation in terms of paragraph 3 of this article, to assign its participating interest in the concession contract to the Government or to other concessionaires that hold participating interests in the concession contract.
- 5. Whenever a concessionaire is served with an assignment notice, it will proceed immediately to assign unconditionally free of charge and free of any encumbrance its undivided participation in the concession contract to the remaining concessionaires in proportion to the undivided participating interests of the receiving concessionaires in the concession contract. Each of the receiving concessionaires is obliged to accept the assignment. The receiving concessionaire shall not be liable for any obligations of the assigning concessionaire incurred before the assignment.
- 6. The Minister who oversees the petroleum sector may revoke the concession contract immediately if the concessionaire, in the period of ninety (90) days from the reception of a notice of a breach of the law or of the terms and conditions of the concession contract [sic]:
  - a) has not cured or removed such violation, as specified in the notice informing [it] of the revocation;
  - b) has not has not paid the compensation required by the Government, as specified in the notice.
  - c) has not initiated court or arbitral proceedings in terms of paragraph 8 of this article.
- 7. Any litigation regarding the revocation of a concession contract may cease, if the terms of paragraph 9 [sic] of this article have been complied with; or if the concessionaire has cured or removed the grounds for the termination by means of a compensation, or by notice of assignment alleging the impossibility of repair or remedy; such situations may be addressed as the case may be for resolution before an independent expert or a judicial or an arbitral court.
- 8. When litigation has been submitted to or a judicial or to an arbitral court, the concession contract may not be revoked while the same [litigation] has not been resolved by a final award not subject to appeal and, in that event, only if the basis for the revocation is consistent with the final decision or award rendered.

- 9. When there is a breach of the terms and conditions of a concession contract that results in litigation between the Government and a concessionaire [and] which has been submitted for resolution to an independent expert in terms of the concession contract, and notice has been sent to a concessionaire in terms of this article, [the concessionaire] may not invoke the litigation as the basis for cancellation as foreseen in the concession contract until such decision of the sole [sic] expert and, in that case, may only do so if its conduct is consistent with what has been decided.
- 10. Abandonment occurs when the concessionaire, without justifiable motive, does not perform petroleum operations in the concession contract area for a minimum period of three (3) months.

### Article 25 (Effect of concession contract extinguishment)

- 1. In cases in which a concession contract terminates for reasons stated in article 22, the rights over the area and the assets integrated therein shall revert without charge to the State, unless there is a contractual provision to the contrary.
- 2. In cases of expiry, relinquishment of [petroleum] rights the concession contract area, and revocation of the concession contract, the concessionaire shall, within ninety days from the date of such relinquishment or revocation, in relation to the entire concession contract area:
  - a) Plug or close off, in a manner consistent with Petroleum industry Best Practice, all wells unless otherwise agreed with or approved by the National Petroleum Institute;
  - b) Take all action necessary, in accordance with Petroleum Industry Best Practice, in order to prevent hazards to human life or to property of third parties, or the environment, resulting from conditions in the awarded concession contract area or, as the case may be, any part thereof, caused by petroleum operations, insofar as such conditions were or should have been, with reasonable diligence, evident at the time of relinquishment or other manner of termination.
- 3. The concessionaire shall forward all the documents related to the concession contract subject to extinguishment or termination [sic] or to

- partial relinquishment of areas of the concession contract to the National Petroleum Institute.
- 4. In cases of relinquishment of areas, [or] termination of an exploration and production concession contract, the Minister who oversees the petroleum sector will declare the area available for the purposes of award of rights for the carrying out of petroleum operations.

#### **Section V**

#### **Concession Areas**

### Article 26 (Configuration and length of areas)

- I. The available areas for the purpose of conducting petroleum operations are divided into blocks of thirty minutes of latitude and thirty minutes of longitude, save for exceptions imposed by the boundaries with other States or other justifying circumstances.
- 2. The areas subject to the concession contracts for the carrying out of petroleum concession shall be delimited by meridians and parallels expressed in minutes, covering one or more blocks or part or parts of a block.
- 3. The areas which result from relinquishment in terms of the provision of the applicable law and the contracts of the concession, and the from partial relinquishment shall be contiguous and delimited by meridians and parallels expressed in minutes, and may however, be a horizontal division approved, in case justifying circumstances occurs.

### Article 27 (Rights to use areas for petroleum operations)

- I. The concessionaire, under a concession contract, is subject to the applicable law to obtain the right of use and enjoyment of the land and maritime areas, contained in the concession contract area for the purpose of conducting petroleum operations.
- The concessionaire may still under the concession contract and through the submission and approval by the Government of a plan to hold the rights of use and enjoyment of land in the area for the conducting of

petroleum operations or construction and operation of facilities.

- 3. Any right referred in terms of paragraphs 1 and 2 of the current article, does not preclude the passage easement access in accordance with the legislation in force relating to access to the site where petroleum operations are conducted, except when such activities interfere substantially with petroleum operations in such area.
- 4. Under the terms of the current article, the concessionaire shall, at all time, have entry and exit access to the concession contract area, as well in any other area subject to the jurisdiction of the Republic of Mozambique where has obtained or constructed facilities.
- 5. The rights provided for on paragraphs 1, and 4 of the current article and article 28, shall be exercised in a prudent manner so as to minimize the negative effects of the interests of eventual legitimate occupier and user of land, lakes, watercourse, maritime space or seabed included in the area concession contract.
- 6. For the purposes of petroleum operations in the awarded area of the concession contract a concessionaire is subject to applicable law and to the necessary Government permits, and shall have the right:
  - a) To make artesian wells and to pass on the surface waters, as well as establish systems for the supply of water;
  - b) To use during the petroleum operations material such as gravel, sand, lime, gypsum, stone and clay; in accordance with applicable legislation;
  - c) Build and operate the necessary facilities and equipment;
  - d) Build, install, maintain and operate all systems and communication installations and transport;
  - e) Build, maintain and operate port facilities and a terminal for the use in the petroleum operations.

#### Article 28 (Resettlement and compensation)

When in the course of petroleum operations, there is a need to resettle, the concessionaire is responsible for the resettlement and payment of fair compensation to such affected people in accordance with the applicable

legislation.

#### Section VI

#### **Operator**

### Article 29 (Operator requirements)

The operator shall, apart from the minimum requirements required for a concessionaire, fulfil the following requirements:

- a) Competence and experience in petroleum operations;
- b) Technical and operational competence based in exploration capacity, development, production and decommissioning;
- c) Experience in the type of petroleum operations intended to undertake under the corresponding concession contract;
- d) Proven experience in the management of relevant petroleum operations, and
- e) Maintain a capable and efficient organized structure, duly authorized, to conduct all petroleum operations, subject to the Mozambican jurisdiction.

### Article 30 (Operator obligations)

The operator, even when it is not part of the concessionaire, is jointly and severally liable with the concessionaire for the daily management of petroleum operations, it shall in particular:

- a) Establish the safety goals and an acceptance criteria for the risk analysis;
- b) Inform the National Petroleum Institute on the status of planned activities;
- c) Involve its staff in developing the management system and keep it updated;
- d) Pay compensation due for the constitution of servitude and expropriation of rights of third parties;
- e) Comply with the regulations in force for the petroleum operations; and

- f) Provide guarantees foreseen in the applicable legislation to be set by the National Petroleum Institute.
- g) To comply with the legislation in force in the Country, including labor standards.

#### **CHAPTER III**

#### PROGRAMS, PLANS AND APPRAISALS

### Article 31 (Types of plans)

- 1. Petroleum operations shall be subject to a detailed and systematic planning.
- 2. The Concessionaire shall submit to the Minister who oversees the petroleum sector the following programs and plans:
  - a) Exploration program;
  - b) Plan of development and production plan;
  - c) Plan of development of the oil or gas pipeline system;
  - d) Facilities plan of development; and
  - e) Decommissioning plans.
- The programs and plans submitted should be as far as possible, excerpts of documentation, programs and plans used by the concessionaire or operator.

### Article 32 (Exploration program)

- 1. Each phase of the exploration activity shall be subject to plan drafted after consultation with the National Petroleum Institute, according to the terms and conditions of the concession contract.
- 2. The plan shall include at least the following information:
  - a) Accurate data about the area to explore, indicating the location of facilities and equipment;
  - b) Work program;
  - c) Exploration and instrumentation methods;

- d) Equipment to be used, transport of equipment, including, in the case of offshore exploration, the speed of the vehicles, vessels, the length of seismic cables, the origin of the equipment and unloading areas as well as an indication of the ports to be used as bases or ports of call to support the exploration activities;
- e) Method of presentation of results;
- f) Environmental impact assessment.
- 3. Each plan shall be submitted to the National Petroleum Institute with a minimum of five weeks in advance regarding the activity starting date, as foreseen for the respective activity or to the start of the respective activity, according to what occurs first.
- 4. Before beginning each exploration activity, in terms of the program or exploration plan, the concessionaire and the operator shall ensure that the respective operations will take place in a secure environment without affecting other activities in the area.

### Article 33 (Appraisal of a petroleum deposit)

- 1. The concessionaire shall notify the National Petroleum Institute, within 24 (twenty-four hours), of any discovery and keep it informed with regard to test results and their evaluation.
- 2. The concessionaire shall, within two (2) months counting from the notice date, submit for the approval of the National Petroleum Institute, an appraisal program containing a definition of a timeline not exceeding (2) two years for the appraisal of the discovery including drilling activities.
- 3. The concessionaire shall submit to the National Petroleum Institute, within (6) six months of completion of the appraisal program, the respective [appraisal] report containing the results of the activities performed and their evaluation.
- 4. The terms and conditions related to the appraisal program and the commercial appraisal of the production and sale of non-associated natural gas are the following:
  - a) At the conclusion of the appraisal program related to a discovery of non-associated natural gas conducted by the concessionaire and the presentation of the appraisal report of

the same, the commercial appraisal period will commence, if the concessionaire so requests, and will remain in effect in relation to any discovery area for a period not greater than five (5) years;

- b) The appraisal report presented in terms of this article shall include the estimated recoverable reserves, pressure and delivery rate of the projects, quality specifications and other technical and economic factors relevant for the determination of a market for the natural gas available. The concessionaire may, at any time during the period of commercial appraisal, inform the Ministry which oversees the petroleum sector, by means of notice, if the petroleum deposit in relation to which the appraisal report was presented is commercial.
- c) In case the concessionaire does not request an extension of the commercial appraisal period in terms of subparagraph a), above, within 180 days counting from the date of the appraisal report, the concessionaire shall inform the Ministry which oversees the petroleum sector if any discovery of natural gas conducted by the concessionaire in relation to which the appraisal report was presented is commercial.

### Article 34 (Declaration of commerciality)

- 1. The concessionaire shall undertake the technical and commercial appraisals necessary to determine whether a discovery may be commercially developed, individually or jointly [with] other petroleum deposits within the concession contract area.
- 2. The concessionaire shall, within one hundred and eighty (180) days from the submission of the appraisal report, notify the National Petroleum Institute informing it whether the petroleum deposits covered by the discovery may be commercially developed, and shall submit a declaration of commerciality that includes a complete description of the relevant data, surveys and evaluations which led to such conclusions.
- 3. If the report mentioned in paragraph 2 of this article concludes that the petroleum deposits that compose the discovery, considered individually or jointly with other petroleum deposits within the concession contract area, may be commercially developed, the corresponding notice shall be deemed a declaration of commerciality.

- 4. The declaration of commerciality made by the concessionaire shall comprise the basis for the Government to decide whether it will exercise the option to participate in development and production of the petroleum deposits, for which purpose the Minister who oversees the petroleum sector may request additional information and clarifications from the concessionaire.
- 5. Should the concessionaire consider the petroleum deposits covered by the discovery unsuitable for feasible commercial development and production, the declaration of commerciality referred to in paragraph 2 of this article, containing the concessionaire's technical and commercial appraisal, shall address the measures necessary to render their development and production commercially feasible and propose additional tasks for the appraisal of the commerciality of such petroleum deposits.

### Article 35 (Unitization of petroleum deposits)

- Should the concessionaire have reasonable indication that the petroleum deposits extend into neighboring areas covered by other exploration and production concession contracts, the concessionaire shall immediately communicate the fact to the National Petroleum Institute, setting forth in the appraisal report detailed information on this matter.
- 2. In the event petroleum deposits extend over more than one concession contract area, all the concessionaires that have relevant rights in the concession areas involved shall, within six months upon declaration of commerciality reach an agreement on how the appraisal work can be optimized through joint or coordinated development and shall submit a coordinated appraisal program to the National Petroleum Institute.
- 3. Once the timeframe referred to in paragraph 2 of this article, the Minister who oversees the petroleum sector may serve a notice to the concessionaires so that the agreement is reached within 3 months from the date of notification, after which if the concessionaires fails to reach an agreement, the Minister may appoint an independent expert to decide on issues related to the unitization where there is no agreement.

4. The approval of a development plan of petroleum deposits which extend over more than one concession contract area shall be contingent on the signing of a unitization agreement among the concessionaires in question.

### Article 36 (Plan of development)

- 1. Within no more than 2 (two) years from the date of the declaration of commerciality, the concessionaire shall prepare and submit to the Minister who oversees the petroleum sector with a copy to the National Petroleum Institute, a development plan outlining the development and production of the respective petroleum deposits.
- 2. The development plan and its subsequent implementation shall be based on the rational use of the petroleum reserves and existing facilities. The production of petroleum from multiple zones with petroleum reserves through a single line of production will only be authorized if it is demonstrated that that method of production is necessary to render the development and production commercially profitable.
- 3. In order to ensure that the Government's and the concessionaire's objectives are compatible, the National Petroleum Institute shall be consulted on the scope and content of the development plan, which shall take into account the respective economic, technical, environmental, [and] safety aspects and the existing resources.
- 4. If the development includes an oil or gas pipeline system or a facility located outside the concession contract area, the requirements of an oil or gas pipeline development plan or a facilities development plan shall also be applicable.
- 5. Except as otherwise provided in the applicable legislation, the development plan shall include at least the following items:
  - a) A description of the strategy and the development concept, as well as the criterion [sic] used for the choices that were made;
  - A description of subsequent development stages, if any, including tie-ins with other fields or facilities, and, if necessary, the form of coordination with other petroleum operations;

- c) A description of geological and reservoir engineering aspects, with particular reference to detailed analyses and evaluations of the geological, reservoir engineering and production engineering features and considerations which form the basis for the selection of the production system;
- d) Description of eventual additional planned exploration activities;
- e) Projected production schedule and studies on the regularity of production and transportation, including an evaluation of the impact of tie-ins to existing or planned facilities and fields;
- f) A description of how coordination with other developments plan will take place, in accordance with applicable law;
- g) Information on the status for other licenses obtained or to be obtained under applicable law relevant to conduct onshore and offshore petroleum operations;
- h) Technical description of the facilities and equipment to be used under the development plan, including the number and type of wells, equipment for production, processing, use of petroleum as fuel at the production site, injection of any gaseous or liquid components including water or chemicals in any form, measurement and storage equipment, pipelines between the various facilities including the offtake and transportation system to buyers of crude oil or natural gas, storage or loading facilities, as well as technical solutions aimed at preventing and reducing to the minimum the flaring of petroleum and environmentally harmful discharges and emissions;
- i) A description on how the contribution to the supply of petroleum to the national market will be carried out;
- j)\List of the quality standards which will be applied;
- k) Information on management systems, including information about development planning, organization and implementation;
- General description of the safety system and its objectives as well as an evaluation of the health and safety assessment which form the basis for the concessionaire's preferred development model, including a description of emergency technical measures;

- m)A separate environmental impact assessment pursuant to the provisions of applicable law;
- n) Summary of the main project implementation, operating and maintenance policies and procedures which will be implemented;
- o) Information on economic evaluations and analyses which form the basis for the choice of a certain development model, recommended solutions and estimates of capital costs, operating costs and decommissioning costs, including a description of how the project will be funded;
- p) Information about the winding up of petroleum operations and decommissioning of facilities, and proposed measures to ensure the funding thereof;
- q) Schedule for the implementation of the development plan;
- r) Proposal for the delivery point; and
- s) Proposal for a point to deliver petroleum intended for the national market.

### Article 37 (Oil and gas pipeline system development plan)

- 1. The oil or gas pipeline development plan, and a description of its systems, construction and operation and its functioning shall be submitted to the Minister who oversees the petrol sector, with a copy to the National Petroleum Institute, as a part of the application process for an oil and gas pipeline concession contract.
- 2. The oil and gas pipeline development plan system and its implementation shall be based on the rational utilization of the petroleum resources and the existing facilities.
- In order to ensure that the oil or gas pipeline development plan objectives are compatible, and satisfy the needs of the interested parties, its scope and content shall be agreed with the National Petroleum Institute.
- 4. An oil or gas pipeline development plan shall include, at least, the following items:

- a) Description of the production facilities, including the petroleum deposit or group of petroleum deposits from which the transportation is planned to be made, with analyses and calculations of the production and engineering features which comprise the basis of the oil or gas pipeline system;
- Estimated volumes expected to be transported, and studies on the regularity of production and transportation, as well as an evaluation of the impact of connections with existing or projected oil or gas pipeline systems;
- Information on the status of license for use and benefit of onshore land and authorizations for undertaking Petroleum operations onshore and offshore as per the applicable law;
- d) Technical description of facilities and equipment planned to be integrated, including an outline of the oil pipeline or gas pipeline system route, and details of any required storage system;
- e) Description of any connection to existing or planned facilities and demarcation in relation therewith;
- f) List of technical and other standards which will be implemented;
- g) Information on management systems, including information on planning, organization and development implementation;
- h) Description of how the existing facilities, equipment and others will be used;
- i) Description of the coordination with other developments plan according to the applicable laws;
- Description of the procedures planned to be used to reach the predefined objectives, including tariffs for transportation of petroleum of third parties;
- bescription of the safety objectives and risk evaluations which justify the selection of the specific development concept of the oil or gas pipeline system;
- I) A separate environmental impact assessment pursuant to the provisions of applicable law;

- m)Summary of the main implementation, operating and maintenance policies and procedures which shall be implemented;
- n) Information on technical evaluations and economic analysis which justify the selection of the specific development concept, and estimates of capital and operational costs and decommissioning costs, including a description of how the project will be funded;
- Outline about the termination of petroleum operations and decommissioning of facilities, and proposed measures to provide financing in respect thereof; and
- p) A program for the development implementation.

#### **Article 38**

#### (Development Plan for the Construction and Operation of Facilities)

- 1. The development plan for the construction and operation of facilities shall be submitted to the Minister who oversees the petroleum sector, with a copy being filed with the National Petroleum institute, as a part of the application process for a concession contract for the construction and operation of facilities; or
- 2. The development plan for facilities and its implementation shall be based on the rational utilization of petroleum resources and of the existing and planned facilities for production and transport.
- 3. In order to ensure that the infrastructure development plan proceeds with its objectives and satisfies the necessities of the interested parties, its scope and content shall be subjected to the approval of the National Petroleum Institute.
- 4. The infrastructure development plan shall, at least, include the following information:
- a) A description of the development concept strategy, and the criteria for the choices made, description of the subsequent development phases and, if necessary, a way of coordinating with other Petroleum operations or concessionaries;
- b) A description of the existing and planned facilities of production and transport, petroleum deposits, with analysis and calculations of existing

- and future production and, the engineering specifications that constitute base for development of the facilities in hand;
- The estimated capacity of the existing and planned facilities and, studies of the projections;
- d) Description of the coordination forms with other development plan according to the applicable law;
- e) Information about other requested authorizations and applicable approvals or to obtain for the conduct of Petroleum operations;
- f) The technical description of the facilities and the equipment associated with the infrastructure and the petroleum operations related to the facilities concession contract, i.e., processing, treatment, liquefaction, storage and loading, measurement, usage of petroleum as fuel in petroleum operations and the technical solutions that aimed at preventing and reducing leakage and the flaring of petroleum, or the reservoir pressure and other potential damages or discharges and environmental emissions;
- g) Technical and commercial information and a description of the connections from the existing facilities to the petroleum operations;
- h) A list of the technical standards and others that will be implemented;
- i) Information about the management systems, including information about programming, organization and implementation of the development;
- j) A description of the ways in which the existing facilities and others will be used;
- k) A description of the procedures to be adopted in order to reach the defined objectives in reasonable terms, namely tariff for the usage of facilities, including its potential use by third parties;
- A description of the security objectives and of the risk assessment that bases the choice of a certain concept of the development of facilities;
- m) Environmental impact assessment, separated according to the law;
- n) A summary of the rules and procedures to be adopted for the implementation, operation and maintenance;

- o) Information about economic evaluations and analysis of the project that base the choice of the development concept, investment and operation cost estimates and demobilization costs, including a description of the way of financing the project;
- p) Information about the termination, closure of petroleum operations and demobilization of facilities and proposed measures to secure the financing of the project;
- q) An implementation program for the development of infrastructure plan.

### Article 39 (Development Coordination)

- The development plans, oil and gas pipeline system development plans and infrastructure development plans submitted shall allow maximum coordination of the programming and implementation of the proposed development.
- 2. The development plans submitted shall describe how adverse material effects over other developments on discoveries made in relevant concession contracts areas can be avoided.
- 3. In relation to each plan submitted to the Government for approval, the concessionaire shall include a declaration, accompanied by evidence, that:
  - a) The plan will be implemented in a coordinated manner with all the other development plans, current and future, of which the concessionaire is expected to be informed;
  - b) The proposed and implemented technical solutions and the use of onshore and offshore areas, do not adversely affect the implementation of other developments within the scope of other concession contracts, at the time of submission of the development plans in question; and
  - c) The concessionaire has consulted the other relevant concessionaries about the matters in subparagraphs a) and b) and declared that its solution is based on all the available information and on the consultations conducted.

### Article 40 (Decommissioning Plan)

- The concessionaire shall submit to the Minister who oversees the petroleum sector a decommissioning plan, with a copy to the National Petroleum Institute, at least 2 (two) years prior to the date scheduled for the end of petroleum operations, or for the reuse or removal of infrastructure.
- The decommissioning plan shall be prepared in accordance with the applicable legislation and assure that the closure of the petroleum operations and the infrastructure demobilization are conducted in a cautious manner and according to the good practices of the petroleum industry.
- 3. The decommissioning plan shall be prepared in consultation with the National Petroleum Institute and shall include at least the following items:
  - a) Details about the adopted measures to execute the decommissioning in each development and production area, including:
    - i. Alternative solutions and other recommendations for the termination of petroleum operations and decommissioning of each development and production area:
    - ii. Proposed aspects for the shutdown and sealing of wells;
    - iii. Prompt removal of the equipment and Facilities that are not necessary for the ongoing Petroleum Operations; and
    - iv. Any other measures that may reasonably be required in order to prevent hazard threat to human life, or to the property of others or to the environment.
  - b) An estimate of the time required to finalize the activities as prescribed by the plan;
  - c) A schedule of decommissioning activities and a description of the necessary equipment for land and/or the sea bed restoration;
  - d) An operations budget to implement the decommissioning plan, including details about the costs for the removal of facilities,

- equipment and Facilities, and restoring the environment affected by petroleum operations;
- e) A scheme of the decommissioning fund in order to meet the costs of implementing the decommissioning plan;
- f) Environmental studies, of engineering and feasibility that may be necessary to support the proposed plan;
- g) An inventory of the material and hazardous chemicals that may be found in the Facilities and plans for its removal; and
- h) A separate Environmental Impact Assessment according to the applicable law.
- 4. In the event that the concessionaire does not submit the decommissioning plan to the Minister who oversees the petroleum sector, the Minister may serve upon the concessionaire a notice requiring the concessionaire to submit a decommissioning plan, within a period of ninety (90) days from date on which the notice was served.
- 5. After the expiry of the deadline referred to in the previous subparagraph, without the concessionaire having submitted the decommissioning plan, the Minister who oversees the petroleum sector, may request international standard specialized consultancy to elaborate a decommissioning plan at the account and risk of the concessionaire.
- 6. The decommissioning plan in terms of the previous paragraph will be implemented for the concessionaire in terms of the applicable law and the concession contract, as if it were its obligation.
- 7. In case the concessionaire considers that the production in a development and production area or the use of infrastructure will terminate before the decommissioning plan, it shall prepare and submit for approval the respective measures for decommissioning that, when approved will produce the effects of an amendment to the development plan for a development and production or facilities area.

# Article 41 (Decommissioning Fund)

- 1. Up before the commencement date of petroleum production or of the use of infrastructure for petroleum operations begins, the concessionaire shall open, in a bank of its choice and approved by the Central Bank of Mozambique, an interest bearing account, in a currency mutually agreed with the National Petroleum Institute, to be designated as "Decommissioning Fund", in which it will be periodically deposited funds that cover the costs established for the decommissioning.
- 2. The calculation and payments of the amounts of decommissioning shall be prepared by the concessionaire and shall be submitted to the Minister who oversees the petroleum sector, containing estimates of:
  - Initial recoverable reserves and the projected production calendar;
  - ii. A total of tariffs and fees generated in relation to facilities;
  - iii. Total decommissioning costs for the decommissioning solution proposed by the concessionaire, as well as an alternative and reasonable decommissioning solutions.
- 3. The concessionaire shall annually update the proposal of the estimated decommissioning costs.
- 4. If the concessionaire did not submit to the Minister who oversees the petroleum sector, an updated plan of the total estimate of the decommissioning costs, in accordance with paragraph 3 of this Article, the Government shall update the total cost of the most recent estimate of decommissioning preliminarily approved to match the escalation of the currency used in such costs approved in the period between the calendar year in which such costs were calculated and the current calendar year, being the concessionaire subject to penalty under this Regulation.
- 5. Adequate measures for successive revisions of such estimates shall, when necessary, be included in any updated decommissioning plan.
- 6. In the event that, at the time of implementation of any decommissioning plan, there are insufficient funds available in the decommissioning fund to finance the activities of the plan, the deficit will be fully paid by the concessionaire.

## Article 42 (Reports and Meetings)

- 1. The concessionaire shall submit for the approval of the National Petroleum Institute the programs, plans, reports, meetings and reviews during the execution of all petroleum operations phases.
- 2. Reports, meetings and reviews provided for in paragraph 1 shall comprise of the current state of the petroleum operations, highlighting any diversion which may have occurred in the exploration activity plans, for the petroleum operations.
- 3. All data, studies, interpretations, assessments of the possible uncertain factors, maps, modules and information about financing and other relevant documents that support the plans and the decisions made by the concessionaire shall be made available to the National Petroleum Institute.
- 4. In the beginning of each one of the following petroleum operations the concessionaire shall agree with the National Petroleum Institute a timeframe for this entity to analyze the plan, of which it may require additional information:
  - a) Drilling program;
  - b) Detailed engineering of infrastructure, including gas and oil pipeline system;
  - c) Construction of facilities, including oil and gas pipeline system;
  - d) Filling of facilities and oil and gas pipeline systems with inflammable substances;
  - e) Regular production;
  - f) Amendments and substantial changes or updates to infrastructure and oil and gas pipeline systems; and
  - g) Decommissioning.
- 5. The concessionaire shall develop and maintain reliable and updated records of the petroleum operations in the concession contract area and provide the National Petroleum Institute with information, available data and reports relating to the petroleum operations, as well as assessments and interpretations relating to petroleum operations when requested.
- 6. Well logs, maps, magnetic strips, sample exhibits and drilling cuttings and other information of geological and geophysical nature obtained by the concessionaire throughout the course of the execution of petroleum

operations, shall be submitted to the National Petroleum Institute. The publishing, reproduction or other use of such documentation shall be subject to confidentiality, as per the prescribed provisions of the applicable laws or the relevant concession contract or any other document that requires the consent of the concessionaire.

- 7. The concessionaire may keep, for its own personal use, copies of the material that make up the paperwork, with the authorization of the National Petroleum Institute, provided that the originals in a size and required quality has been handed over.
- 8. The concessionaire shall keep the National Petroleum Institute constantly informed about the important phases of the petroleum operations [and] shall also prepare and present
  - a) A report about the work progress containing in particular a description of actions taken in the scope of the concession contract during that trimestral of a calendar year, accompanied by diagrams and maps representing the locations in which the described work were done, within two (2) months counting from the end of each trimestral of a calendar year;
  - b) An annual report detailing and, where necessary, review and develop the trimestral of a calendar year reports about the work progress submitted in the that calendar year, within four (4) months counting from the end of each calendar year;
  - c) Copies of all the documentation and its results related to petroleum operations up to three (3) months counting from the end of any activity or program that constitutes petroleum operations,.
- 9. Unless otherwise provided in applicable regulations, reconnaissance concession contracts and exploration and production concession contracts, or in the exploration activities plan and in the development plan, the concessionaire will provide, and guarantee, that the operator provides weekly, documentation and information about the hour and Location of the exploration, including the handling of mobile equipment, equipment, vehicles and vessels or trade during the exploration.
- 10. The concessionaire shall submit annual quarterly reports to the National Petroleum Institute, about the exploration activities performed on the previous trimestral of a calendar year.

11. Within three (3) months after the completion of the exploration activities, the concessionaire shall send a copy of all the documentation related to these activities and the results obtained, to the National Petroleum Institute.

#### **CHAPTER IV**

#### MANAGEMENT OF PETROLEUM OPERATIONS

## Article 43 (Performance of Petroleum Operations)

The concessionaire shall ensure that operator or any person who carries out petroleum operations or other activities related to the petroleum operations perform them:

- a) in accordance with, the concession contract and other contracts and related documents as well as decisions and administrative instructions issued by the competent bodies in accordance with the applicable legislation;
- b) prudently, diligently respecting optimal oil recovery and in accordance with Petroleum Industry Best Practices;
- c) in accordance with the environmental and safety standards generally accepted in the international petroleum industry and applicable at all times in similar circumstances;
- d) in accordance with the petroleum operations plans approved by the government.

## Article 44 (Appointment of a Representative)

 The concessionaire shall appoint a general manager residing in Mozambique to represent it and notify his identity to the Minister who oversees the petroleum sector, with a copy to the National Petroleum Institute, within thirty days from the effective date of the concession contract. 2. In the event such representative terminates his/her relationship with the concessionaire, within 30 days, the concessionaire shall indicate an acceptable substitute to the Minister who oversees the petroleum sector, and notify [the Minister] of his/her identity.

## Article 45 (Petroleum Operations Management)

The concessionaire shall, no less than (30) thirty days counting from the effective date of the concession contract, have and maintain an organized structure with powers to manage the petroleum operations and other aspects arising from the applicable laws and related to the concession contract parting from Mozambique.

# Article 46 (Liabilities)

If the concession contract has more than one concessionaire, any obligation arising out of the concession contract is regarded as jointly, except the following, which constitute individual obligations of each of these legal persons:

- a) Pay corporate income tax or any other tax assessed and levied on profit or net income;
- b) Observe confidentiality obligations set out in the concession contract, save in respect of their enforcement to any actions performed or to be performed by the operator in discharging his functions; and
- c) The obligation to fulfil any foreign exchange determinations, save in respect of their enforcement to any actions performed or to be performed by the operator in discharging his functions.

## Article 47 (General Obligations)

1. During the performance of petroleum operations the concessionaire and the operator shall develop, implement and update the policies, strategies, [and] conduct appraisals, plans and technical solutions in order to:

- a) Ensure that the petroleum operations are carried out in accordance with the objectives set in terms of safety, work environment, health and protection of the environment from pollution;
- Ensure that the petroleum operations are performed with resort to established technology consistent with the technological development and in accordance with the agreed commercial principles;
- c) Perform petroleum operations in order to optimize the extraction and use of petroleum resources and to ensure the recovery of the maximum possible existing commercially recoverable petroleum in petroleum deposits;
- d) Ensure that existing and planned facilities and the capacity of the Oil or Gas Pipeline Systems are used for the extraction and rational use of petroleum resources;
- Ensure that all measures are taken to avoid the harmful leaking of water or any other damage to the oil formations that can be crossed during drilling operations or after the abandonment of any well;
- f) Control the flow and prevent spill or loss of petroleum;
- g) Prevent the loss of natural energy of the Petroleum Deposit [sic];
- h) Identify and correct existing or potential deviations from plans;
- i) Ensure compliance with regulatory principles and requirements.
- 2. The concessionaire and the operator have the responsibility to ensure that all their personnel or [sic] the subcontractors' personnel are fully informed about the contents of this Regulation.
- 3. The responsibility of the concessionaire and of the operator does not limit in any way the responsibility of each employer and each worker in performing [their] work in accordance with this Regulation.

## Article 48 (Management System)

- 1. The Concessionaire shall implement a management system which:
  - a) Ensures the systematic management and implementation of its activities;
  - b) Contributes towards the continuous effort in improving petroleum operations;
  - c) Provides for comprehensive and coordinated regulatory supervision of the petroleum operations;
- 2. Employees and their representatives shall be fully informed about the management system and take part in the development, introduction and the update of the system.
- 3. The management system shall, inter alia, include the following elements:
  - a) Listing of the petroleum operations' objectives;
  - b) An overview of the relevant rules and regulations that are applicable and a description of the mechanisms for keeping updated information with regard to amendments or new regulations;
  - Specific applicable requirements in respect of safety, work environment, environment protection, and resource management which form the basis for planning, implementation and updating the petroleum operations;
  - d) Means of organization of the planned activities, including a description with the distribution of responsibilities, authority and duties;
  - e) Description of personnel needs and their respective qualifications;
  - f) A manual of procedures, instructions, or other routines norms describing the planning and implementation of activities in order to achieve the proposed objectives;

- g) Procedures or instructions manuals describing how the breaching of rules are handled;
- h) Plans for updating and further development of the management system.

# Article 49 (Qualifications and Staff Training)

- 1. The staff involved in petroleum operations shall have appropriate qualifications and training for an effective job performance, as prescribed by the applicable laws.
- 2. For the identification of relevant task classes in terms of safety and environmental protection as well as for the selection of staff responsible for project verification, a certain criteria should be established.
- 3. The concessionaire shall ensure that the staff involved in the petroleum operations, under their direction and of the operator, is acquainted with infrastructure, policies and procedures relevant to the activity as well as ensuring that the staff has appropriate training and experience in dealing with emergency situations.

# Article 50 (Training of National Experts)

- 1. The concessionaire shall contribute to the training of national technicians in accordance with the terms of the concession contract.
- 2. The concessionaire shall provide and guarantee that the operator trains the technicians involved in the management and control of petroleum operations and co-related activities, as well as the training of trainers assigned to Public Institutions or associated, in accordance with the terms set forth on the concession contract.
- 3. The training program shall be implemented in accordance with the terms and conditions set forth in the concession contract.
- 4. Each concessionaire shall cooperate with the Ministry that oversees the petroleum sector in indicating the agreed number of technicians [involved] in the management of petroleum resources, monitoring and control of petroleum operations [and] opportunity to participate in

- activities offered by the concessionaire or any of its affiliates for its employees.
- 5. Each concessionaire shall pay as stipulated in the concession contract, their respective share of the annual amount specified under the contract, for training, institutional support and social support programs for the Government during the term of the concession contract.
- 6. The concessionaire and the Government shall establish a mutual agreement on the content of training activities to be financed by the concessionaire. The agreement on the costs or the amount financed is to be used as a credit against the obligations of training of the following year. If the payments have been made in cash, then, following, the first payment will be made on the first anniversary day of entry into force of the concession contract, subsequent payments shall be made annually on the same day.[sic]

# Article 51 (Employment of Nationals)

- 1. In carrying out petroleum operations, each concessionaire shall employ nationals who have suitable qualifications at all levels of the organization such as subcontractors or promote that the subcontractors employ national citizens.
- 2. In consultation with the Ministers who oversee the petroleum and labour, employment and social security sector, the concessionaire shall propose and implement a training and employment program for its Mozambican employees in each phase and level of operations, considering security requirements and the need to maintain reasonable efficiency patterns for conducting petroleum operations.
- 3. The hiring of foreign citizens is governed by the applicable legislation.

## Article 52 (Social Projects)

- 1. Each concessionaire shall implement social investment projects in accordance with the provisions of the concession contract.
- 2. The implementation of any social investment shall be in accordance with the Corporate and Social Responsibility Policy for the Extractive Industry Sector of Mineral Resources.

# Article 53 (Documentation and Samples)

- 1. The operator shall establish, maintain, archive the materials and documents which ensure and demonstrate the safe and effective performance of petroleum operations.
- 2. The operator shall establish and maintain updated file systems or storage documents and samples required for the prudent conduct of petroleum operations, which should be organized to allow a systematic and speedy access to data.
- 3. The operator shall deliver to the National Petroleum Institute any copies of documents or duplicates of the samples collected during petroleum operations, when so requested.
- 4. On termination of the concession contract, all original documentation and archived samples shall be handed over to the National Petroleum Institute.

# Article 54 (Documentation and Samples Export)

- 1. Original documents and samples collected shall remain in Mozambique.
- 2. The documentation provided for in the previous paragraph includes:
  - a) a description of the geological and geophysical work carried out in the concession contract area;
  - b) the data and results of seismic acquisition programs and other geological and geophysical surveys;
  - c) maps, interpretations and reports resulting from geological, geophysical and technical work on the contract area;
  - d) records on drilling, graphic logs, deepening, testing, closure and relinquishment of wells;
  - e) records of formations and subsoil crossed by wells;
  - f) the description of the original pit outline, its supplements and any changes made;

- g) records of occurrence of oil, water or other minerals susceptible of economic exploitation or hazardous substances found;
- h) the interpretations, analysis, evaluations and studies based on the samples;
- i) detailed plans and construction of processing facilities and oil and gas pipelines system.;
- j) operating records, including pressure registration, temperature, flow, alarm and closure situations;
- k) reports for inspection, accidents and discharges.
- 3. The export of documentation, samples, and/or other materials constituting documentation for processing or for examination or laboratory tests, are subject to approval by the National Petroleum Institute, provided that samples are equivalent in size and quality, or equivalent quality copies when it comes to material susceptible reproduction.

# Article 55 (Procurement of Goods and Services)

- 1. The acquisition of goods and services for the execution of petroleum operations in an amount equal to or greater than 80,000,000.00 MT (eighty million Meticais) shall be carried out by public tender. [sic]
- 2. In the acquisition of goods and services the concessionaire shall ensure that foreign natural or legal persons are in association with Mozambican natural or legal persons, resulting in a substantial contribution to the production or creation of value to goods and services that are Mozambican in origin or generated by Mozambican persons. [sic]
- 3. In the evaluation of tenders, the quality of service, price, delivery time and the guarantees offered shall be taken into consideration.
- 4. The concessionaire or operator shall give preference to local products and services when comparable in terms of quality to international goods and services and are available on time and in the required quantities and their price, including taxes, does not exceed by more than 10% the prices of available imported goods.

- Local goods and services means those that in essence or measured by added value are predominantly manufactured, built or executed in Mozambique.
- 6. The Tender [sic] for acquisition of goods and services shall comply with the following principles:
  - a) There should be a reasonable period for the preparation of the bidders;
  - b) All selected suppliers should receive the same specifications;
  - The specifications, the tender periods and the delivery timeframes should be formulated so as not to unduly exclude competitive suppliers;
  - d) A copy of the list of selected pre-qualified bidders shall be sent to the National Petroleum Institute;
  - e) Before the award of major contracts, the National Petroleum Institute shall be informed of the operator's decision.
- 7. If the National Petroleum Institute, after discussion with the Operator, concludes that the tender procedures were not followed, it may request the Operator that it reconsider its decision on the award of the Contract.

**CHAPTER V** 

**FACILITIES** 

**SECTION I** 

Third Party Access to Facilities

## Article 56 (Tariffs for Third Party Access to Facilities)

- The Methodology for setting tariffs for third party access to facilities is subject to the approval of the Minister who oversees the petroleum sector.
- 2. The calculation of tariffs for the use of facilities by third parties will be established in the infrastructure concession contract or by a specific agreement subject to the terms of the concession contract, on the following principles:

- a) The tariff is based on the total reserved capacity of the facilities during the period in question;
- b) The tariff includes the capital cost and the operational cost;
- c) The tariff includes the profitability, reflecting the risk of the owner of the infrastructure, not exceeding the rate of return.
- 3. If the parties do not reach an agreement in relation to use or increase of capacity, within six months counting from the date of the application for the use or capacity increase of infrastructure, depending on the contractual terms, the matter may be settled:
  - a) By arbitration; or
  - b) By the competent judicial authorities.

#### **SECTION II**

#### **Production Facilities**

# Article 57 (Design and Construction)

- 1. The facilities and workplaces shall be planned, designed, constructed, equipped and installed in such a way that the different petroleum operations are carried out safely and efficiently in accordance with the Petroleum Industry Best Practices.
- 2. The concessionaire shall base its project on internationally recognized standards which should be included in the development plans. The infrastructure and workplaces shall also observe the requirements of the applicable national standards. Different standards should not be applied in the same area.
- 3. The planning of new facilities and modifications of existing facilities should take into account the equipment available and new technologies, in order to maintain the objectives of the management system in accordance with this regulation.
- 4. During the design, construction or operation and utilisation phases, deficiencies which could cause a hazard or accident shall be prevented.

- 5. All infrastructure and places of work should be kept in appropriate conditions and safety during construction.
- 6. The functional requirements of the facilities should appear in a written document, set the lifetime of the project, taking into consideration and define the possible variations of flow levels; the pressure conditions, temperature, composition and characteristics of the fluid.

## Article 58 (Facilities Design)

- 1. The requirements for the operation and maintenance of infrastructure shall be defined in writing during the stage of the project and serve as the basis for the preparation of its respective procedures.
- 2. The concessionaire shall, when projecting the Installations, ensure the best possible access to its inspection and maintenance.
- 3. The facilities shall be designed in such a way as to ensure access and rescue, and shall be provided with adequate means of rescue.
- 4. The facilities shall be designed in such a way as to minimize the consequences of fires or explosions. The systems and their components shall be designed to minimize risks of eruptions, fires and explosions, with a view to allow effective fight against fires, reducing the risk of personal injury and equipment to the minimum. Appropriate systems for the detection of fires and gas shall be installed.
- 5. The facilities shall be classified according to the risk of explosion and separated by different security zones according to this criteria and in accordance with the accepted international standards and Petroleum Industry Best Practices.
- 6. Areas of appropriate safety shall also be established around each infrastructure.
- 7. The buildings which house hydrocarbons shall be ventilated and, if necessary, have pressure control panels.

## Article 59 (Risk Analysis)

- 1. The Concessionaire and the operator, based on risk criteria carefully considered, are obliged to perform risk analyses of the facilities operations and related activities that should be considered an integral part of projects or detailed plans.
- 2. The risk analysis should be performed in order to identify the consequences in terms of people, the environment and property, including financial interests, of isolated failures or in sequence that may occur.
- 3. In the risk analysis, it should be taken into account, among other things, the facilities design, the operations to be carried out, the work processes and the training programs for the staff involved in the activity.
- 4. In the facilities design and in the planning activities measures, to eliminate or reduce the risks identified through the Risk Analysis should be taken.
- 5. The risk analysis should be updated to follow the progress of the petroleum operations.
- 6. Particular emphasis shall be given to the integration of the risk analysis results in the manuals, procedures and operational reports.

# Article 60 (Project Supervision)

- 1. The entity responsible for monitoring the project shall be independent in relation to the performer.
- 2. If reference is made to recognized standards, but with different specifications, the supervision carried out by following these standards should be included in global check.
- 3. The evaluation of different monitoring methods used in the various phases should take into account the complexity and critical intensity of the project.

## Article 61 (Data Record)

- 1. The National Petroleum Institute may require that at the facilities be installed, at the expense of the operator, data recording instruments that will be considered important for the performance of petroleum activities.
- 2. The concessionaire shall also be responsible for the maintenance, registration, data processing and presentation of reports costs.

# Article 62 (Supporting Structures)

- 1. The structures and their components shall:
  - a) operate satisfactorily under normal conditions, taking into account, among other factors, the deterioration, movement, mountings and vibrations;
  - b) have safety mechanisms suitable to withstand accidents caused by wearing and tearing;
  - c) be able to withstand safely the potential deforming actions, in particular resist against disruptions or non-elastic large movements;
  - d) have mechanisms for adequate safety against possible risk situations or accidents;
  - e) resist with safety, in the case of floating structures, subject to free movements, sinking and submersion.
- 2. The structural system, including the details and components, shall be designed in such a way that the structures:
  - present ductile properties and low susceptibility to local damage;
  - b) are easy to manufacture;
  - c) present an uniform distribution of tensions;
  - d) are resistant to corrosion and other types of deterioration;
  - e) allow simple control, maintenance and repair actions.

3. The selected materials to be used on the supporting structures should be appropriate for this purpose, and its characteristics shall appear in a written document. During the components and connections manufacturing process of manufacture, these should be subject to the specifications of the manufacturer, the tests and checks, which should take into account the importance of each of the components on the safety of the structure. The structure shall be protected from possible deteriorations.

## Article 63 (Protection Against Corrosion and Erosion)

- 1. For the protection of facilities, account should be taken of the requirements against erosion, corrosion inside and outside, as well as the temporary protection during the construction phase.
- 2. Systems, equipment and procedures for permanent control of the corrosion and erosion phenomena shall be developed and installed in order to ensure the safety of operations during the lifetime of the facilities.

# Article 64 (Electrical Systems and Instruments)

- 1. The electrical systems and the instruments should be designed and installed in such a manner as to minimize the risk of explosion, avoid injury, assure a basic operation of an emergency and ensure the regularity of production. Electrical installations shall be in accordance with the classification of the area and in accordance with local and international standards for petroleum installations.
- 2. The instruments for monitoring and recording of data relating to the conditions of safety shall be connected to an emergency power source.

## Article 65 (Telecommunications)

The installations shall be equipped with telecommunication systems appropriate to ensure the safety of the installation and its operation in accordance with the legislation in force, and the installation of remote control telecommunications systems may be imposed.

# Article 66 (Lifting Equipment)

- 1. The installation of lifting equipment is mandatory, and its operation should be planned and conducted so as to avoid errors or operational failures, and working in situations of danger or accident.
- 2. The operator is obliged to implement technical, operational or regulatory measures in order to cope with hazardous or accidental situations.
- 3. The operator shall perform risk analyses to identify the likelihood and the consequences of the occurrence of isolated failures or in sequence during the removal operations and shall take measures to reduce the risks.
- 4. The devices and lifting equipment shall be designed, operated and maintained in accordance with accepted national and international standards. In choosing devices and lifting equipment it shall be taken into account the patterns and climatic conditions to which they will be subjected.
- 5. The devices and lifting equipment shall be inspected before the first use, by a competent technician who shall issue a certificate of conformity, and shall subsequently be inspected for at least once a year.
- 6. After each repair or modification, the lifting equipment shall be subject to a new certification by a competent technician.
- 7. The operator shall assure that the personnel involved in the lifting operations have the necessary qualifications to operate the equipment in a safe manner.

## Article 67 (Working Environment)

- 1. At the designing stage of the installations a program regarding the working environment that describes how the safety objectives and the working environment requirements will be achieved shall be prepared. Safety officers shall have an active participation in the preparation of such program.
- 2. The workplace and residence of people, access, transport routes and lifting devices shall be designed so that the work and the movement of people, goods and equipment are carried out in a logical and satisfactory manner.

- 3. The accommodation and camps shall be designed, equipped and located to provide acceptable levels of safety, environment and health. Development shall be designed so that the areas of accommodation or camping are separated from the drilling, production areas and from auxiliary systems. The description of the staff needs shall be in writing and the housing and camps capacity shall be designed according to this description. The areas for housing or camps shall have appropriate facilities for leisure.
- 4. Workplaces, equipment and operations shall be organized so that staff can perform their work safely and:
  - a) the work shall be planned to reach a reasonable level that each individual worker can develop;
  - b) the staff should not be subject to adverse conditions that may cause injury or illness;
  - c) the working areas and equipment shall be designed and organized to enable a correct attitude and work posture at the individual level;
  - d) the equipment for control and supervision of production processes, technical devices and working operations shall be designed and organized according to ergonomic principles accepted as suitable for the interaction between man and machine;
  - e) hand tools and work equipment used shall be appropriate not to cause injury or illness to workers.
  - 7. Safety devices for machinery shall be designed to protect workers from contact with dangerous parts of the equipment and to prevent injury during use.
  - 8. The work area should be lit up to ensure that the work is performed in a safe and prudent manner, namely:
    - a) the lighting should contribute to highlight the unevenness of the terrain, physical obstacles and protrusions likely to cause injury;
    - b) light poles shall be designed and placed in a way that they avoid the accumulation powder and corrosion as well as to enable their maintenance and that the change of light bulbs can be performed safely.

## Article 68 (Safety Measures during Construction)

1. Preference should be given to the use of materials that are not harmful when used individually or in combination with other materials or gases.

- 2. The characteristics of materials should be evaluated taking into account the emissions of dust, gases or steams harmful to health, and any other effects on working conditions and environment and the well-being of workers. The characteristics of materials when exposed to fire or excessive heat shall also be assessed.
- 3. Plans should be drafted to ensure that the equipment available to the workers is appropriate to the performance of work in safety.
- 4. The danger of chemical exposure involving health risk; in particular during storage, use, handling and disposal of chemicals in working operations and which produce or process chemicals shall be minimized. The danger of accidents and diseases caused by prolonged exposure to chemical, should also be minimized.
- 5. The exposure of workers to noise shall be minimized as much as possible, particularly through the use of appropriate technology, namely:
  - a) the level of noise in the various areas of the installations shall comply with the levels that can be achieved in accordance with the contemporary technological standards;
  - b) no worker should be exposed to noise levels that may damage the hearing system;
  - c) Signs at the entrance of compartments or areas where the level of noise can damage the hearing should be placed.
- 6. The vibrations of the whole body or hand-arm should as far as possible, be avoided.
- 7. When the work is performed outdoors, the precautionary measures to be taken when the weather conditions so justify should be defined, in particular where the work should be restricted or interrupted. Conditions requiring the suspension and abandonment of facilities should be defined.
- 8. At the entrance to compartments and nearby equipment areas, that are likely to cause injury or damage to the health of the workers, warning signs should be place in accordance with internationally accepted standards.

#### **Section III**

#### Oil and Gas Pipeline System

## Article 69 (Oil or Gas Pipeline System Project)

- 1. The oil or gas pipeline systems' project shall be sufficiently detailed in order to demonstrate that the integrity and operability of the System will be maintained over its useful life, in particular on the following:
  - a) representative values of loads and system resistance to them shall be used, in accordance with good engineering practices;
  - b) the analysis methods may be based on analytical numerical, empirical models or a combination of these methods;
  - c) safety principles based on the project "capacity-limit" may be applied, provided that all the fundamental principles and utility threshold are considered;
  - d) all relevant sources of unsafety and resistance of loads shall be considered and be made available, including the statistic data sufficient for the characterization of those variables.
- 2. The requirements for operation and maintenance of the oil or gas pipeline system shall be established and put in writing to be used as a basis for the design and preparation of Operating and Maintenance Procedures.
- 3. The system design shall identify and take into consideration, during the design phase, the loads that may cause or contribute to the damage or inoperability of the oil or gas pipeline systems. The loads shall be classified as functional, environmental, of construction or accidental.
- 4. The design and operation of oil or gas pipeline system that cross the borders of neighbouring countries shall be coordinated with the parties on the other side of the border and the regulations of the neighbouring country shall be appropriately considered.
- 5. Oil or gas pipeline systems shall be equipped with issuing and receiving devices for internal inspection and maintenance of equipment and shall allow the use of mechanized and as well as a leakage control system shall be installed.

## Article 70 (Safety of Oil or Gas Pipeline System)

- 1. The oil and gas pipeline systems shall meet national and international requirements concerning public safety protection, environmental, of employees that work in the system or in its vicinity.
- 2. It is mandatory to carry out a safety study to identify potential hazards caused by human activity along the oil and gas territorial pipelines and the following rules shall be observed:
  - a) definition of safety zones and restrictions to be implemented during the construction, trade, transit and use of open flame;
  - b) classify the pipeline location in relation to population density and concentration according to accepted standards;
  - c) calculation of the oil or gas pipeline dimensions, for each segment, based on this classification, in the risk analysis made, and in line with accepted standards;
  - d) the National Petroleum Institute, based on the information provided in the oil or gas pipeline development plan, shall set the standards to be used.
- 3. Based on conducted safety studies, the oil and gas pipeline systems shall be divided into sections by installing stations with valves. The emergency shutdown valves shall be able to be operated by remote control.
- 4. The location of the compression and pumping stations, in relation to the main oil or gas pipeline and surrounding areas shall be made to minimize the effects of potential accidents.
- 5. As far as possible, the buildings and installations shall be located outside the safety zone, unless there are valid reasons. When the buildings and installations are located within the safety zone, they shall be designed in such a way to provide protection to the staff during risk situations or until their evacuation to safety.

# Article 71 (Oil or Gas Pipeline System Route Selection)

1. The construction of oil and gas pipeline systems in residential areas or in areas of intense human activity shall be avoided.

- 2. It shall be taken into consideration the environmental impact during construction and over the lifetime of the Oil or Gas Pipeline System, as well possible loss of fluids, emissions and discharges of gaseous elements.
- 3. The survey and selection of the route shall take into account the following factors:
  - a) the safety of persons;
  - b) the environmental protection;
  - c) other properties and infrastructure;
  - d) the activities of third parties;
  - e) the geotechnical and hydrographic conditions;
  - f) the requirements for construction, operation and maintenance;
  - g) the local requirements;
  - h) future exploration activities.
- 4. The routes of terrestrial oil or gas pipelines systems shall be previously and properly demarcated.

# Article 72 (Installation and Operation Oil or Gas Pipeline System)

- 1. When the oil or gas pipeline systems cross other oil or gas pipelines systems, cable or lines of whatever other type, the respective interested parties shall establish upon agreement on standards procedure, which shall subsequently be approved by the National Petroleum Institute.
- 2. The onshore oil or gas pipelines shall be underground in order to prevent their damage, unless if other technical solution is acceptable. The depth shall be sufficient to prevent damaging of the oil or gas pipeline system by permitted activities within the safety zone. Non underground sections shall be properly secured to prevent access by unauthorized persons.
- 3. The offshore oil or gas pipelines systems shall be underwater or protected in order to avoid external damage and to reduce or prevent interference with other activities. Regulatory authorities of other activities in the area shall be consulted in the definition of requirements in order to reduce or prevent possible interference.
- 4. Prior to the oil or gas pipeline filling up with flammable substances, a pressure strength and leaks tests shall be carried out in accordance with specific procedures. The connections that cannot be tested under pressure shall be subject to special control measures.

- 5. The oil or gas pipeline systems shall be monitored by two independent systems:
  - a) an integrated control system;
  - b) a protection and alarm system.

# Article 73 (Drilling and Wells)

- 1. The equipment and materials used in drilling activities and wells shall be appropriate for the purpose and be protected against abnormal loads. The units and the well intervention aid equipment shall be designed, built, installed, tested, operated and maintained in accordance with this Regulation.
- 2. The operator shall define safety objectives and tolerance criteria for risks and conduct risk analyses foreseen in Article 60. One of the overall objectives of the safety of drilling activities and wells activities shall be avoiding failures that involve a life-threatening situation of the personnel involved or cause serious damage to the facilities, materials and third parties goods and to the environment. This objective applies both to operational errors and failures related to facilities and equipment used directly in the operations, as the equipment with auxiliary functions.
- 3. During drilling activities and activities in the wells at least two independent barriers and sufficiently tested shall be available in order to prevent accidental flow from the Well. If a barrier fails, it shall be restored before returning to the well operations. At the design stage a barrier plan shall be established for each operation to be performed from an installation. In order to meet the barrier plan it shall be defined functional requirements regarding the ability of drilling and control equipment, operational capacity and ability to mobilize. All systems and components shall meet these requirements.
- 4. During the design phase, manufacture, installation and operation of control systems, the organization of the facilities shall be taken into account, its classification as a safety area and the main safety plan. The control systems shall be operable by independent panels located in convenient locations. In the drawing or design of the control system the possibility to reduce failures and their consequences shall be considered. In case of failure of the control system components with critical functions, shall be able to keep itself in good condition or move to safe positions.

- 5. The working areas where drilling activities and activities in wells take place shall be properly prepared to ensure staff safety and operations. Special attention shall be given to storage, assembly, disassembly and suspension of drill pipe, the "master pipes" and pipe coating as well as the transport between the storage location and the drilling rig.
- 6. The equipment exposed to pressure shall be designed, manufactured, tested and maintained in accordance with the requirements of this regulation and with the internationally accepted technical standards. The safety devices shall be tested in accordance with established procedures. When the safety devices are activated to avoid excess pressure by a pressure control system shall be mounted to prevent injury to workers and damage to the environment, assets and financial interests.
- 7. The installation shall be equipped with a tank with sufficient capacity to support the amount of drilling fluid necessary to ensure full control of the Well and contain permanently sufficient quantities of drilling fluid and other materials. The drilling fluid system shall have sufficient capacity to support a rapid increasing fluid drilling in an active system and increase the weight of the drilling fluid in the event of instability in the well. A reconditioning system shall be installed with equipment required for removing the fluid of the gas so that the drilling fluid maintains the required quality. The composition of drilling and completion fluids shall be adjustable so that the required fluid properties are maintained. It shall be possible to continuously control the fluid forming the barrier or part of barrier element.
- 8. The Blowout Preventer (BOP) shall be designed and installed in order to maintain their functional capacity as barrier and will be installed at the initial stage of the operation. BOP, is understood as an emergency closing valve installed in the Well's mouth during the drilling process or well testing, which incorporated hydraulic systems capable of closing spaces surrounding the drilling pipe against elevated pressure and avoiding the exit of fluids or gas from the well.
- 9. The valves and switches (*impulsionadores*) of "Christmas Trees" type and the safety valves shall be installed in sufficient numbers and in order to ensure its barrier function and shall be tested on the basis of established procedures and in accordance with a program of tests. These procedures shall be applied to functionality tests and for leaks or spills.
- 10. The drilling installations and wells shall be provided with affordable equipment, which can ensure well control and allow staff to operate and close the well during the drilling activities in case of an uncontrolled influx into the

well. In case of equipment failure, the mobile installations shall be removed to a safe area when the well is in a situation of uncontrolled flow.

## Article 74 (Offshore Facilities)

- 1. Fixed or floating facilities used at sea shall be designed and equipped in order to have stability or a foundation that allows them to operate safely and withstand the anticipated loads, according to Mozambican legislation in force and accepted international standards.
- 2. The docking device, the anchoring system and the dynamic positioning of ships or floating facilities used at sea shall have dimensions and be operated in accordance with the Mozambican legislation in force, the Petroleum Industry Best Practices and internationally accepted maritime standards.
- 3. The Minister who oversees the petroleum sector may during the exploration and appraisal phase establish, according to maritime legislation, other conditions for conducting petroleum operations in floating facilities or ships, regardless of them being registered in Mozambique or in a foreign State.
- 4. The registering of floating production facilities is performed as per the applicable legislation.

#### Section II

#### **Processing and Ancillary Installations**

# Article 75 (Requirements for Processing and Ancillary Installations)

- 1. Before choosing the type of project for processing and ancillary installations a comprehensive global plan shall be established taking into account the following:
  - a) issues related to the environment;
  - b) the regularity of operations;
  - c) the qualification of the personnel;
  - d) the maintenance strategy;
  - e) the changes in operating conditions;
  - f) the possible changes in operating conditions and future needs.

- 2. The processing and ancillary installations shall be designed and located in such a way that the risk to staff, environment, property and financial interests do not exceed the level of risk established by safety objectives.
- 3. In the selection of materials for processing and ancillary installations, the following aspects shall be taken into consideration:
  - a) loading and environmental conditions that may be subject to, during construction, installation, maintenance and operation;
  - b) potential changes in operating conditions;
  - c) putting in writing the principles that guide the choice of critical materials;
  - d) when new materials are introduced, they shall be subject to analyses, calculations and tests, which can demonstrate their compliance with established safety criteria.
- 4. The flow or discharging levels and the capacity of the installations shall be determined taking into account reaction times, capacity and safety of control systems, and operational aspects such as vibration, noise levels, pressure and effect fluctuations caused by water.
- 5. In the design of processing and ancillary installations, attention shall be paid to the staff level and convenience of operation or scheduled maintenance. The instruments and control equipment for processing and ancillary installations shall have a high level of safety.
- 6. When the ancillary and processing installations are located in mobile facilities, a special attention shall be given to the ways infrastructure moves, in order to ensure a safe and efficient operation on certain conditions.
- 7. Water Tanks for formation and drainage shall be equipped with:
  - a) a closed drainage installation for water formation;
  - b) an open drainage installation for areas with risk of explosion;
  - c) an open drainage installation for non-hazardous areas.
- 8. Electrical installations shall have sufficient capacity to provide simultaneous energy to all consumers in the Installation. The start-up of the major energy consumers shall be possible without overloading the power station and create the risk of supply disruption, taking into account the existing amount of simultaneous users.

# Article 76 (Safety for the Processing and Ancillary Installations)

- 1. The organization of processing and ancillary installations and the classification of the area where it is implemented shall be considered as a whole. All machinery and ancillary equipment shall be in accordance with the classification of the area in which the equipment is installed.
- 2. The pressure chambers with foundations, rotating machinery, piping systems, including brackets and penetration devices in areas containing oil or other potentially hazardous means, and accident conditions, shall be able to withstand the heat and the explosive charges.
- 3. Processing and Ancillary Installations shall be equipped with pressure control devices, which offer protection against abnormal pressures. Drainage shall be designed to avoid accidental releasing of liquid and gaseous hydrocarbons.
- 4. The area classification and the results of the risk analysis shall be included in the ventilation systems specifications and they shall ensure that the concentration of smoke, particles, steam and gas is kept below specified limits. The system ventilation shall be designed in order to have adequate capacity to perform the functions of cooling and heating equipment, as well as ensure greater ventilation in the spaces where there are sources of risk of ignition and gas inlet.
- 5. In the event of changing of the processing and ancillary installations, risk analysis shall be updated and necessary measures shall be taken to maintain or improve the original ventilation conditions. Areas with natural ventilation shall be of sufficient air circulation to ensure that gas concentrations and pollution levels are kept within the specified limits. The closed or partially closed spaces with natural ventilation shall comply with the accepted technical standards, concerning the size of openings in walls, floors and ceilings. In areas without sufficient natural ventilation it shall be ensured a mechanical ventilation and project motorized fans with motors and other accessories in ventilation systems to prevent sparks.
- 6. The boilers with a heating unit meet the requirements of the accepted standards. The heating unit for boilers shall be supplied with combustion air from secure areas. The exhaust gas shall be conducted to a safe area, and its piping shall be designed so that the spark combustion is not possible to take in a source of ignition. For offshore installations, the exhaust gas shall be driven out of the facility, in order to not become inconvenient for people or cause hazardous situations for helicopter traffic or supply ships.

# Article 77 (Design of Processing Facilities)

- 1. In areas with risk of icing or hydrating, installations shall be provided with devices for injecting glycol or methanol, or other similar measures. The self-ignition or pyrolysis shall be evaluated in the choice of materials, procedures for inspection and maintenance and the components shall be equipped with thermal insulation.
- 2. The separation equipment shall have sufficient capacity to separate the components of the well stream. In the design of such equipment it is compulsory to predict the effects of changes in well flows over time. The equipment shall be designed so that those located downstream are not adversely affected, and shall have means for removal of sand and drainage. The equipment shall be able to separate hydrocarbon from formation water and ensure its purity.
- 3. The containers under normal atmospheric pressure and the pressure containers shall as a rule:
  - a) be designed and used in accordance with internationally accepted standards;
  - b) when they contain hydrocarbons, shall be equipped with two separate devices for protection against high pressure
  - c) not affect the devices to prevent high pressure in the event of deformation or damage to the equipment inside;
  - d) be equipped with pressure and vacuum valves with adequate capacity;
  - e) be placed inside the equipment so that it does not cause damage or deformation thereof;
  - f) be defined the inspection and maintenance conditions during the design and construction phases.
- 4. The pipes shall conform to the requirements of internationally accepted standards. It shall also be considered loads mentioned in the accepted standards and loads caused by abnormal conditions, such as the effect of water.
- 5. In the analysis of the loads effects, it shall:
  - a) be taken into account the loads transferred to associated equipment;
  - b) be given special attention to the tubing of the installations subject to large movements and deformations and installing movements under certain environmental conditions;

- c) be defined the supervision and maintenance conditions during the design and construction phases.
- 6. Valves and switches shall be designed and manufactured to withstand the loads to which they may be subject to, according to the requirements of internationally accepted standards. The valves and switches that are part of the emergency shutdown system shall withstand fire or explosion that may be subject to. The great importance of valves in terms of safety shall be tested in accordance with established procedures and their testing program, including function tests and spills and leaks.

## Article 78 (Design of Ancillary Installations)

- 1. The rotary compressors shall have the necessary equipment for the control of oscillations and pressure relief. Piston compressors shall have the necessary equipment for control and reduction of the pressure pulse variation. Compressors with a closed oil system shall have an efficient degassing equipment and shall be protected against the failures of the oil sealing system until it has been depressurized.
- 2. The liquid separators shall:
  - a) Protect the compressor installations, and the liquid drainage shall be performed in a safe and prudent manner;
  - b) Be equipped with installations compression locking devices for abnormal rising of fluid level;
  - c) In the event of abnormal decrease fluid level, drainage discharge valve close automatically;
  - d) Be able to collect to the compressors all drops and liquids released from the gas flow in all operating conditions.
- 3. Installations with gases and fuel oil shall be organized in order to ensure maximum operational regularity, provide fuel in sufficient quantities, and conform to the pressure specifications, temperature and pollution limits. The drain fluid of fluid separators shall be performed in a safe and correct manner. The liquid separators shall be equipped in a way that the fuel gas installations are closed in the event of an excessive rise in the Fluid Level. In the case of an excessive decrease of Fluid Level, the drain discharge valve shall close automatically.

- 4. Pneumatic installations for air supply to the working equipment shall be designed in accordance with accepted technical standards for tanks, pipes and compressors. The limit values of the condensate, purity, pressure variation and air temperature shall be defined. The facilities shall have compressors with sufficient capacity to ensure stable operating conditions. They shall be equipped to meet the air emission limit.
- 5. The inert gas installations shall be designed in accordance with the technical standards for tanks, pipes and compressors, including the tank transport patterns containing gas. When choosing the inert gas system, the consequences of any leakage and instruments for detection shall be particularly taken into account. Special measures shall be taken to protect structure that may cool due to the inert gas leak in liquid contained in the vessels. The hoses and connections used for inert gas liquid shall be appropriate for this objective and shall not be confused with the air connections or other connections.
- 6. Installations for the use of chemicals shall be able to receive, store and distribute chemicals properly. Installations for chemical use shall as far as possible, have a fixed storage for tanks and piping stocking. The location of installations shall be directed to, among other things, the safety of staff of the tanks or supply vessels transport operations and the risk of fire and explosion. When the piping is connected to installations containing oil or systems under high pressures, shall as far as possible be placed near the check point of injection valves.
- 7. In choosing the rotating machinery it shall be taken into account, among other factors, safety, energy saving, ease of operation and maintenance, previous experience, new technologies and be in accordance with internationally recognized standards.

#### **Section V**

#### **Systems in Facilities**

## Article 79 (Safety Systems)

1. The installations shall be equipped with adequate safety systems, designed to prevent any defects or failures that endanger people, the environment, property and financial interests.

- 2. The safety system shall include among other mechanisms:
  - a) A fire alarm;
  - b) A fire and evacuation alarm;
  - c) Emergency lighting;
  - d) Emergency locking systems;
  - e) Safety operation systems;
  - f) Operation control systems;
  - g) Gas leakage systems; and [sic]
  - h) Emergency power systems;
  - i) Fire extinguishers.
- 3. The systems shall always be in operation and subject to regular maintenance in order to verify if it keeps its operational capacity, as well as be designed and protected in order to retain the operational capacity in case of an accident.
- 4. The systems and their components shall resist environmental loads to which they may be subject to.

## Article 80 (Fire and Gas Detection Systems)

- 1. In the installation areas where there is a possibility of accidental fire or gas discharge, fire or flammable and toxic gases detection systems shall be installed.
- 2. The systems shall allow the rapid and reliable detection and activation of a fire and gas discharge alarm, indicating the incident site, in case of actual or potential fire, and in the case of accidental discharge of gas. With the alarm triggered, they shall automatically act to prevent or mitigate the consequences of fire or gas discharge.
- 3. The systems provided for in this provision shall:

- a) Be independent and cannot be negatively influenced by failure of other systems;
- b) Have components able to withstand certain loads in order to maintain the operating capacity during a certain period of time;
- c) Designed to allow monitoring, maintenance, testing and modifications.

## Article 81 (Emergency Locking Systems)

- 1. The installations with equipment containing petroleum shall have a strong emergency locking system that prevents or limits the leakage consequences and eliminate potential sources of ignition.
- 2. In the processing unit it shall be installed isolating valves connected to the system, so that the fire does not exceed the capacity of the individual resistance elements.
- 3. Once activated the Emergency Locking System, it shall ensure maximum safety of the installation and equipment. The manual emergency locking system shall be located in strategic places, well demarcated and protected against accidental activation. The system shall be activated manually or by other means.
- 4. The components incorporated in the System shall be independent or supplementary to other systems. Emergency shutdown valves may be used as the safety valve process. The emergency locking system cannot be affected by failures of other systems. The valves, when installed, will have the emergency locking valves function, with emphasis on:
  - a) The valves in the production and injection tubing or referred to as Sub Surface Safety Valve;
  - b) The valves in the production and injection wing or the wing valve;
  - c) The main automatic valve;
  - d) The valves of the christmas tree in connection with the injection of chemical or gas survey;

- e) The valves of isolation process in sections.
- 5. Components incorporated in the system shall be designed for the loads to which they are subject. The systems shall be tested without interrupting operations.
- 6. All emergency locking valves shall be designed for easy access and equipped with a position indicator. All information on the status of executed actions shall be automatically transferred to the control centre.
- 7. The installation of emergency shutdown valves shall be done in a safe and controlled manner.

# Article 82 (Processing Safety Systems)

- 1. The facilities equipped with processing units or connected to these installations shall have a processing safety system. The system shall be strong, able to detect abnormal operating conditions that may involve danger and can prevent abnormal situations leading to dangerous situations.
- 2. The system shall be designed to operate independently and with the same level of safety of other systems. Emergency shutdown valves may be used as the processing safety system valves.
- 3. Components incorporated in the processing of the safety system shall be suitable for the loads to which they are subject.
- 4. When activated, the sensors with locking functions shall give a warning sign.
- 5. The testing of processing systems can be performed without interrupting operations.
- 6. Blocking valves incorporated in the system shall be fixed in the correct position.

# Article 83 (Processing Control Systems)

1. The installations that have a processing unit shall be equipped with a control of the high safety processing system that allows a safe and regular monitoring of processing and ancillary facilities.

2. Components and equipment incorporated in the system shall be suitable for the loads to which they are subject.

#### Article 84 (Gas Exhaust Systems)

- 1. The exhaust systems should be installed to eliminate flammable and toxic gases from the installations whenever it is necessary. These systems can be manually operated at a safe distance that ensures the protection of the equipment. The activation systems can be activated by other systems.
- 2. The exhaust system, when activated shall ensure the gas is discharged to a safe location and the rapid depressurisation of the equipment.
- 3. The system shall be designed such a way that the exhaust gas does not cause injury to personnel or damage to the environment, property and financial interests.
- 4. The state of the exhaust gas system components shall be controlled.
- 5. The system shall be designed in a way that maintenance and functional testing can be carried out expeditiously, without interrupting the operations.

# Article 85 (Fire and Rescue Alarm)

- 1. Working facilities or the staff housing shall be equipped with highly reliable warning systems for the events such as fire occurrence and the need of rescuing.
- 2. The fire alarm shall be able to be operated manually from the Control Centre and, if possible, from other positions.
- 3. The rescuing alarm shall be activated from the Radio room or from the Control Centre.
- 4. The manual activation of fire-fighting system shall activate the fire alarm.

## Article 86 (Emergency Power System)

- 1. The 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.
- 2. Uninterrupted power supply to emergency circuits shall be ensured during the switch from the main power system to the emergency power system.
- 3. The systems' primary engines shall have as few potential interruptions as possible so as to ensure its continuous operation.
- 4. The system shall be arranged and protected so as to remain operative in the event of an occurrence of an accident and testing shall be possible without interrupting operations.

# Article 87 (Emergency Lighting)

Working and residential installations shall be equipped with emergency lighting capable of ensuring sufficient lighting within the facilities in danger and during accidents.

#### CHAPTER VI

#### **OPERATIONS REQUIREMENTS**

#### **SECTION I**

#### **Safety and Environment**

## Article 88 (Safety General Requirements)

1. The concessionaire shall promote a high level of safety and establish global safety objectives and working environment for specific phases of petroleum operations.

- 2. The concessionaire and the operator, and their contractors shall establish safety requirements and working environment for petroleum operations.
- 3. The concessionaire and the operator shall ensure compliance of the specific requirements and the specific requirements of its contractors.
- 4. The regulation of the concessionaire and operator shall include the identification of safety requirements and specific working environment for the performance of petroleum operations that should form the basis for decision-making or to carry out the tests which differ in relation to established procedures.
- 5. The Environmental Impact Studies, including impact reduction measures should be performed in all areas that may be affected by petroleum operations authorized under the concession agreement.
- 6. Preference shall be given to the use of chemicals which are less dangerous to health and for greater security in order to minimize the risk to personnel, to the environment and infrastructure. The recycling of materials and chemicals should be considered.
- 7. The concessionaire at all times during petroleum operations shall ensure that measures taken in the interest of safety, health, welfare or environmental protection are in compliance with applicable law and best petroleum industry practices legislation.
- 8. To verify safety and environmental conditions, systematic assessments should be carried out and the results should be used to reduce risks.

#### **SECTION II**

#### **Environment**

### Article 89 (Environmental Protection)

- 1. During the performance of petroleum operations the concessionaire or operator, under this Regulation shall:
  - a) Comply with the environmental protection legislation;

- b) In accordance with petroleum industry good practices, employ updated techniques, practices and methods of operation for the prevention of environmental damage, residues control and prevention of loss or damage to natural resources;
- c) Comply strictly with the obligations relating to environmental protection which has assumed under the concession agreement and the respective approved plans.
- 2. The concessionaire or operator undertakes, for the purposes of this Regulation, to take all necessary and appropriate action to:
  - a) Ensure, appropriate compensations for damage to persons or property caused by the petroleum operations;
  - b) Avoid irreversible environmental damage to the concession agreement area and adjoining or neighbouring lands and marine areas caused by the petroleum operations; and
  - c) Rehabilitate, on its account, all areas that suffer environmental damage resulting from petroleum operations.
- 3. The concessionaire or operator shall establish and maintain records of all environmental impacts resulting from petroleum operations.
- 4. The concessionaire or the operator shall take all measures to avoid:
  - a) Accidents and material damage resulting from its activities and the functioning and operation of infrastructure;
  - b) Pollution, damage or risk to the staff and third-party property;
  - c) Pollution or harm to animals, vegetation, marine life and monuments;
  - d) Pollution or other damage to aquifers, lakes, rivers, springs, soil and water fountains discovered in the course of petroleum operations;
  - e) Air pollution; and
  - f) Damage to petroleum deposits.
- 5. The concessionaire shall ensure the monitoring and implementation of the reduction measures of all operational and accidental discharge, handling of waste and emissions of pollutants into the air, sea, groundwater, lakes,

rivers, wells, springs and soils. Operational discharges shall be within the limits set by the entity with authority over environmental issues.

- 6. The concessionaire shall inform the National Petroleum Institute on the amount of operational discharges, accidental spills and waste.
- 7. The concessionaire shall use corrective measures and repair damage to the environment arising from the performance of Petroleum Operations.

# Article 90 (Breach of Environmental Rules)

- 1. Whenever the Government consider that any operation, infrastructure or activity under a concession agreement endangers the life of humans, animals or property, will notify the concessionaire on the corrective measures to be taken, in accordance with the applicable law.
- 2. Whenever the concessionaire does not comply with the terms provided in this Article or breach any applicable law relating to the prevention of pollution or damage to the environment and if such failure or contravention result in any pollution or environmental damage, the Government will take the legally envisaged measures.
- 3. Without prejudice to the preceding paragraph the concessionaire shall immediately take all necessary steps to remedy such failure or contravention and its effects.

### Article 91 (Protected Areas)

- 1. The concessionaire shall notify the National Petroleum Institute in relation to any objects, areas or environmentally protected resources, archaeologically, historically or that of otherwise may be affected by petroleum operations.
- 2. In cases where petroleum operations are conducted next to any protected area, the concessionaire shall obtain these additional licenses or approvals from the Government as required by applicable law.

#### **SECTION III**

#### **Safety and Working Environment**

### Article 92 (Conduct of Petroleum Operations)

- 1. The concessionary shall have an organization, in Mozambique, able to, independently, manage and conduct petroleum operations and that allows it to assess and guarantee the safety and efficacy of petroleum operations.
- 2. Operations in facilities shall be carried out safely and efficiently and in accordance with regulations, contracts and approvals, as well as with Good Petroleum Industry Practices.
- 3. Manuals and operating procedures, maintenance and quality assurance of facilities allocated to petroleum operations shall be prepared and made available to the National Petroleum Institute before the beginning of operations.
- 4. The operations may not begin before involved staff be informed about the content of procedure manuals and have received sufficient training.
- 5. Before the beginning of any Operation, shall develop a Descriptive Plan on How to Execute the Operation, in which state the equipment to be used and the security measures to be implemented. It should also be prepared and submitted a report of monitoring carried out prior to the beginning of operations to the National Petroleum Institute for inspection.
- 6. It shall be drafted a maintenance facility and equipment systematic program, which besides registering the breakdown and repairs and replacement events it shall indicate the scope and frequency of the routine checks.
- 7. If the safety devices are deactivated during maintenance or due to abnormal situations, this decommissioning shall be clearly marked by signs placed in visible locations giving a clear indication of the devices affected by the fault.
- 8. The operator shall regularly inspect the infrastructure, systems and operations, check their technical condition and repair them or modify them when and if needed, to ensure planned security levels. They should be made

available to the National Petroleum Institute reports of all inspections and repairs carried out.

### Article 93 (Working Environment)

- 1. The specific objectives of the work environment shall be prepared for the various phases of petroleum operations and these objectives shall be compatible with the concessionaire's.
- 2. The definition of the workplace specific requirements shall be based, namely, in the provisions of this Regulation.
- 3. The designed work environment program shall outline the implementation of the objectives of the work environment, the safety focal points and working environment committee shall actively participate in the preparation and implementation of the program according to the provisions of this Regulation.
- 4. The concessionaire shall ensure that all the staff involved in petroleum operations are subject to medical examinations on a regular basis in order to identify possible long-term effects of working conditions and implement mitigating, corrective and compensatory measures, as appropriate.
- 5. The concessionaire shall ensure that the operator provides health care to the staff as well as the requirements and qualifications of the medical staff.
- 6. Health aspects shall include, among others:
- a) Health services;
- b) State of preparation in respect of health care and health services;
- c) Transport of sick and injured personnel;
- d) Hygienic aspects; and
- e) Provision of potable water, clothing and food distribution.
- 4. In each Facility there shall be a system of security agents and a committee for the work environment.

### Article 94 (Protection and Safety)

- 1. It shall be developed and carried out risk and safety analyses to serve as a basis for injury prevention measures and loss of human life resulting from work accidents or other hazard. Workers should be informed of the safety and health standards and measures necessary to minimize risks.
- 2. In accordance with internationally accepted standards, protection and safety signs shall be placed at the entrance of compartments and nearby areas of equipment that may cause injury or damage to health of workers.
- 3. The concessionaire shall ensure that the equipment and installations made available to the workers are suitable for the work to be done to ensure the safety and health at work.

### Article 95 (Applicable Technical Rules)

- 1. To petroleum operations are applicable national technical rules and complementarily the international norms accepted in the Petroleum Industry, such as, the International Standard Organization, American Society of Mechanic Engineers and American Petroleum Institute.
- 2. The norms to be applicable shall feature in the development plan.

#### **CHAPTER VII**

### DRILLING OPERATIONS AND OTHER ACTIVITIES IN WELLS

### Article 96 (Drilling Activities)

- 1. Drilling and other well activities shall at all times be carried out in a safe and proper manner, and:
  - a) Measures shall be taken to ensure regularity and prevent the interruption of petroleum operations;

- 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 conceived and developed so as to be under control at all times;
- e) Safety equipment for drilling shall be installed in accordance with the requirements of the planned activities and with applicable law;
- f) The ground or seabed shall be examined prior to drilling or prior to the installation or setting up of facilities or equipment required to drilling a Well or borehole so as to ensure that the external environment will not cause damage to existing installations.
- g) Before the beginning of any drilling and the related activities with wells, the concessionaire shall draft and submit for analysis by the National Petroleum Institute a wells program including a contingency plan for a quick turn around and effective response should there be an explosion, fire, discharge, residues or oil leakage or reservoir damage.
- 2. The concessionaire shall ensure that the operator:
  - a) Establish plans and procedures for drilling and simultaneous operations on wells;
  - b) Identify, by means of risk analyses, situations where well control may be lost or other hazardous situations that may occur as a result of simultaneous activities;
  - c) Establish the operational limits applicable to drilling and well activities undertaken within the same infrastructure;
  - d) In accordance with the established procedures, shut down wells in areas where falling objects are capable of causing damages thereto.
- 3. The position of a well shall be determined in accordance with recognized positioning methods.
- 4. In the event of a blow-out or fire, leakage, waste or loss of petroleum or damage to petroleum reservoir, the operator shall immediately notify the

Ministry which oversees the petroleum sector. The operator shall promptly implement the relevant contingency plan and as soon as practicable thereafter submit a full report thereon to the Ministry with authority that oversees the petroleum sector.

# Article 97 (Documentation, Reports and Samples Related to the Activities in Wells)

- 1. In accordance with Article 39, the National Petroleum Institute may require the preparation of an exploration activity plan related to each well, prior to the commencement of the following activities:
  - a) Drilling;
  - b) Formation testing;
  - c) Completion or re-completion;
  - d) Well reconditioning;
  - e) Well plugging;
- 2. The concessionaire shall disclose documentation describing the technical, organisational and administrative principles on which the safety of the planned activities is based.
- 3. During drilling operations, the operator shall provide the National Petroleum Institute with copies of daily reports on the drilling operations.
- 4. In the events of significant changes to the activities programme, interruptions of petroleum operations, and dangerous incidents or accidents, the operator shall immediately notify the National Petroleum Institute.
- 5. Fragment samples resulting from drilling shall be taken and, if necessary, evidence from the sampling of geological formations. In addition, logs shall be obtained and samples of formation fluids shall be collected in connection with formation testing. Samples, logs and copies of any analyses performed, including stratigraphic and lithological interpretations, shall be made available to the National Petroleum Institute, when requested.

6. No later than three months subsequent to the completion of an exploration or appraisal well, a final report on the well shall be submitted to the National Petroleum Institute and such report shall include a composite well log and a summary of the results of the surveys performed and their interpretation. In the case of a discovery, the report shall also contain the operator's appraisal, according to Article 33.

# Article 98 (General Operation Requirements)

- 1. The concessionaire shall ensure that the operator fulfils all the necessary measures to ensure that operations are carried out in safely manner in case there is a chance of discovery surface natural gas.
- 2. During a drilling in well sections with proven resistance of the geological formation, the operator shall carries out an estimate of the location where such formation resistance is the weakest. Procedures for the implementation of drilling operations and estimation of formation strength shall be documented in the drilling programme. In case of insufficient consistency of the geological formation, the implementation of the programme shall be revised and corrective procedures shall be defined. Registration of relevant data for measuring formation pressure shall begin as earlier as possible in the drilling process.
- 3. The drilling fluids based on oil derivatives and synthetically manufactured shall only be used when such used as per safety and operational criteria.
- 4. Fluid volumes shall be verified prior to, during and subsequent to the removal of equipment from the well. Procedures shall be established to remove the unintentional influx of fluids from the well, as well as to maintain pressure control in the event of their loss.
- 5. Geologic formation testing including drilling, hydraulic fracturing, acid treatment or other physical or chemical treatment of the well shall be done according to requirements in this Regulation and with the Best international petroleum industry practices.
- 6. Well control equipment shall be periodically tested and examined under pressure so as to verify that its barrier functions.
- 7. Prior to temporary or permanent plugging of a well is carried out, the zones with flow potential shall be located so as to prevent the eruption of petroleum and other formation fluids.

### Article 99 (Production)

- 1. Unless specifically stated in the approved development plan, production of petroleum from multiple zones with petroleum deposits through one production line shall be subject to the approval of the Ministry which oversees the petroleum sector.
- 2. The operator shall regularly monitor the petroleum deposit performance during production in order to ensure a balanced 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, produced or injected quantities, the quality of crude oil, gas and water formation as well as the location of the contact zones between gas, crude oil and water.
- 3. Flared petroleum, used as fuel or used for other purposes in the production place shall be closely monitored and recorded in order to keep such consumption of petroleum low and efficient.
- 4. Documentation on reservoir and production monitoring shall be disclosed to the National Petroleum Institute, when requested.

# Article 100 (Tests, Inspections and Reporting)

- 1. Prior to operating the infrastructure, the operator shall perform tests, inspections and checks to make sure that the safety requirements established in this Regulation or in other applicable law are complied with.
- 2. The report comprised of documentation on the appraisal activities, the results of any undertaken tests, inspections and checks, and an evaluation of such results shall be disclosed to the National Petroleum Institute for its consideration.
- 3. During the functioning of the Installations, the concessionaire shall develop and implement a testing and inspection regular program with the aim of determining if the facilities are in a technical acceptable state, are safe and be able to repair or modify to ensure the level of planned safety.

4. Results of each inspection and restoration shall be documented and disclosed to the National Petroleum Institute.

# Article 101 (Registration, Monitoring and Reporting of Incidents and Damage)

- The concessionaire shall establish a system for registration, evaluation and monitoring of any accident, damage, injury, or any relevant event in terms of safety.
- 2. The injuries to personnel, significant material damage and hazardous incidents shall be reported immediately to the National Petroleum Institute, and shall also be communicated the results of the investigations of the incident.

# Article 102 (Amendments, Modifications and Damage Repair)

Changes and modifications of facilities and equipment, as well as the repair of damage, shall be carried out in accordance with specific procedures, appropriate for the maintenance of safety levels.

### Article 103 (Hazardous Materials)

- Transport, storage and use of hazardous material shall take place in a controlled manner and in accordance with applicable Mozambican law, as well as with internationally accepted principles and rules, and for the purpose it shall be made available written norms and procedures for its handling.
- 2. The danger of chemical exposure involving health hazards shall be minimised, namely, during the storage, use, handling, and disposal of chemicals, including in operations or processes which produce chemical substances. Chemicals hazardous to health shall be classified, labelled and identified in accordance with the international standards.
- 3. If chemicals are moved into other containers or appliances, it shall be ensured that the contents are labelled and clearly identified so as to allow the identification of their contents by personnel, of which hazards are connected with the use of such chemicals, and of which safety precautions should be taken. Prior to the use of chemicals hazardous to health, a table

- of instructions, regarding the applicable safety rules of each of such substances, shall be available at the work site.
- 4. Personnel shall wear individual protective gear against risks which may not be otherwise avoided or limited to an acceptable extent.
- 5. The use of radioactive substances shall be limited to situations were strictly necessary as per the applicable law.

### Article 104 (Petroleum Measuring)

- 1. Petroleum produced and transported shall be measured in accordance with applicable law.
- 2. The measurement shall be made according to accepted international standards.
- 3. The equipment shall be calibrated by a certified entity.
- 4. The calibration and measuring procedures shall be audited by the National Petroleum Institute.
- 5. The National Petroleum Institute may, at any time, inspect or audit the equipment and measuring procedures that are used. If the equipment or procedures used are found to be defective or ineffective, the concessionaire shall effect the necessary corrections.
- 6. If the National Petroleum Institute concludes that the equipment or procedures used have generated an incorrect calculation of Production Levels, this shall be considered as existing from the last Inspection, unless specific reasons warrant the conclusion that such situation was prior thereto or if the concessionaire demonstrates that such defect or inefficiency has been present for a shorter period of time.

### Article 105 (Information on the Petroleum Produced)

1. The concessionaire shall provide, documentation on quantity, composition, specific weight and other properties of petroleum produced from each individual petroleum deposit, on such regular intervals determined by the National Petroleum Institute.

2. Documentation shall be equally disclosed regarding the quantities of petroleum which has been sold, used as fuel at the production site, flared, injected or which have wasted, for which purpose the National Petroleum Institute may require additional documentation.

### Article 106 (Flaring of Petroleum)

- 1. The flaring of petroleum and the use of petroleum as fuel for production is subject to approval of the National Petroleum Institute and shall be strictly controlled and registered in order to maintain low and efficient consumption levels.
- 2. The authorization shall determine the duration, volumes and quantities of petroleum.
- 3. The flaring of petroleum for short periods of time and aimed at undertaking wells tests, ascertain the functioning of facilities, for safety or emergency reasons, shall be notified to the National Petroleum Institute in 24 hours maximum, followed by a detailed report in the following 7 days maximum.

#### **CHAPTER VIII**

#### **EMERGENCY AND CONTINGENCY REQUIREMENTS**

### Article 107 (Emergency and Accidents)

- 1. The operator shall be prepared for eventual cases of emergencies and accidents which may lead to loss of life, injuries, pollution or damage to the property.
- 2. The operator shall take the necessary measures to prevent or minimize the effects of accidents and to restore the environment in accordance with a contingency plan which shall define potential cases of accidents and their consequences.
- 3. The operator shall cooperate with other operators on the creation of the contingency plans.

- 4. Under certain circumstances, the National Petroleum Institute may issue orders and stipulate conditions for such cooperation, including the participation of operators in the financing of the contingency plans.
- 5. The Ministry that oversees the petroleum sector may proposed to the Government, in case of an emergency, the coordination of intergovernmental contingency measures, within the level of the Southern African Development Community.
- 6. In the event of an accident or emergency, the proposed measures in the contingency plans will be coordinated by the Minister who oversees the petroleum sector, without prejudice to the powers assigned to other entities, that can:
  - a) Order other entities to provide emergency resources and necessary equipment; and
  - b) Undertake other measures to obtain the necessary additional resources through other means.

# Article 108 (Contingency Plans)

- 1. The operator in representation of the concessionaire shall submit a contingency plan to the National Petroleum Institute, for the handling of accidents and hazardous situations which may occur during petroleum operations, which should contain the following information:
  - a) An organizational chart with a description of the responsibilities and channels of information reporting and duties of each individual in the event of accidents and hazardous situations;
  - b) A list of equipment intended for use in each accident or in each hazardous situation with the precise description of nature and type of equipment, its capacity, location, means of transport, usage and corresponding area of use;
  - c) a program of action which describes the alarm and communication systems, including means of communication with authorities, the duties of private parties, of when and on which terms the emergency equipment is to be used, of how the operations shall be performed, the measures for limiting the extent of the damage caused by the accident or hazard, and the procedures for winding up the operation.

- 2. The plan shall be updated, compatible with the national contingency systems and submitted to the National Petroleum Institute, and to whom it may concern.[sic]
- 3. The National Petroleum Institute shall be notified prior to carrying out the emergency exercises and shall receive the respective report.

# Article 109 (Emergency Equipment)

The National Petroleum Institute in coordination with the General Inspectorate of the Ministry that oversee the petroleum sector may require the installation of emergency equipment such as fire-fighting equipment, oil barriers, vehicles, standby boats or aircraft's, within or near the facilities or even of main equipment involved in petroleum operations and stipulate the operational requirements of each of such equipment under these circumstances.

#### **CHAPTER IX**

#### **DEVELOPMENT AND PETROLEUM PRODUCTION**

# Article 110 (Petroleum for National Consumption)

- The objectives of supplying the domestic market shall be considered based on the total production of petroleum of all petroleum deposits under Mozambican's jurisdiction, to be delivered at the applicable delivery points, as indicated in the approved development plans, in accordance with the State's right to use petroleum.
- 2. As part of the approval of the development plan and to comply with the objectives of supplying the domestic market, the concessionaire shall make available a certain volume and quality of petroleum at a specified point for delivery to the national market.
- 3. The Government through *Empresa Nacional de Hidrocarbonetos, E.P.* promotes and facilitates the purchase by domestic offtakers, the distribution and domestic consumption and use of natural gas for industrial or other purposes in accordance with the principles of efficient

- management of resources, open market price established in the Gas Master Plan and other subsequent documents.
- 4. The terms and conditions of natural gas sales in the internal market, including indicative volumes and prices, shall be established by the Ministry that oversees the petroleum sector, in contracts entered into between *Empresa Nacional de Hidrocarbonetos, E.P.* and the concessionaires taking into account the commercial conditions of the market.

### Article 111 (Title)

- 1. The State and the concessionaire individually take title to and the delivery of their entitlement of petroleum at the delivery point.
- 2. The Government shall exercise its right to acquire petroleum belonging to the concessionaire in accordance with the following terms:
  - a) In respect of any month unless during such month the Government is taking Petroleum Production Tax entirely in kind pursuant to the terms of applicable law and of the concession contract; and
  - b) As long as it is also exercising the same right pro rata amongst all petroleum producers in the Republic of Mozambique to the extent possible taking into account the geographical location of the production in relation to the geographical location of the needs.

### Article 112 (Production and Use of Natural Gas)

- The concessionaire shall have the right to use natural gas in petroleum operations, including, but not limited to, for pressure maintenance and recycling operations or liquefaction in the performance of petroleum operations.
- 2. The terms and conditions relating to the use and production of associated natural gas will be the following:
  - a) If the concessionaire chooses to process and sell the associated natural gas, the concessionaire shall notify the Minister who oversees the petroleum sector of this fact and, for the purposes

- of cost recovery and right to production, this natural gas will be treated by the parties in the same way as other natural gas.
- b) If the concessionaire chooses not to process and sell the associated natural gas not used for the purposes set forth in next paragraph, the Government may, without any payment to the concessionaire but at its sole account and risk, collect this natural gas in the petroleum separator, provided that this collection does not disrupt or delay the conduct of petroleum operations.
- 3. The concessionaires shall research the market opportunities and seek to develop a market for non-associated natural gas produced from any development and production area and shall sell such non-associated natural gas on a joint dedicated basis on conditions common to all concessionaires of the exploration and production concession contract in question.
- 4. Any contract for the sale of such associated natural gas entered into by the concessionaires in accordance with this provision shall be subject to approval by the Minister who oversees the petroleum sector, except when such sales are not made to an affiliated company.
- 5. In the submission of such approval application, the concessionaires shall demonstrate to the Minister who oversees the petroleum sector that the prices and other terms and conditions of sale of such natural gas represents the market value obtained for this natural gas, taking into account fair market cost for the transportation of natural gas from the delivery point to the purchaser.

#### **CHAPTER X**

#### **INSPECTIONS AND PENALTIES**

### Article 113 (Inspection and Auditing)

1. The general inspectorate of the Ministry that oversees the petroleum sector has the authority to inspect the places, buildings and facilities where petroleum operations are carried out to ensure the rational and sustainable use and enjoyment of petroleum.

- 2. The general inspectorate of the Ministry that oversees the petroleum sector, upon prior notice to the operator, has the right to observe the implementation of petroleum operations and inspect all goods, records and data in the possession of the operator and the concessionaire.
- 3. The National Petroleum Institute may appoint representatives to ensure the calibration of measurement systems, other maintenance routines and audits in order to maintain the system reliability and conform, after due appointment [as] representatives on site on a temporary basis, to accompany the measurement stationed, as long as [sic] the number of such representatives are as many as may be decided by the Minister who oversees the petroleum sector.
- 4. When necessary the operator shall provide all the assistance and means necessary for the performance of its inspection activity.
- 5. The operator shall avail to the authorities with authority to inspect all the respective inspection, accidents, discharges and leaking reports.
- 6. Representatives of the authority with inspection powers shall comply with all the applicable procedures on health and safety established by the operator.
- 7. The Minister who oversees the petroleum sector may determine that the costs directly related to the audits and inspections of petroleum operations be supported by the operator, as per the terms of the respective concession contract.

### Article 114 (Fines)

- 1. Non-compliance with petroleum legislation and the terms of the concession contract shall be subject to a penalty fine, in the minimum amount of 5,000,000.00MT and the maximum [amount] of 50,000,000.00 MT.
- 2. Non-compliance with specific administrative orders and instructions shall be subject to be levied a penalty fine, for each day of non-compliance, in the minimum amount of 500,000.00MT and the maximum [amount] of 5,000,000.00 MT.
- 3. The graduation of fines referred to in the preceding paragraph shall be made in accordance with the seriousness of the infringement, [its]

dimension and consequences within the internationally accepted standards in the petroleum industry.

- 4. The fines referred to in this provision are imposed by the General Inspectorate of the Ministry that oversees the petroleum sector and payable at the Treasury Office of the respective tax jurisdiction, in the month following the month in which they were levied, and shall be earmarked as follows:
  - a) 40% to the State; and
  - b) 60% to National Institute of Petroleum.

# Article 115 (Accident Investigations)

- 1. Without prejudice to the applicable provisions of law, in cases of serious incidents, the Minister who oversees the petroleum sector, may appoint a commission to carry out its investigation.
- 2. In the event of a serious incident which has led to, or could lead to an accident, the General Inspectorate of the Ministry that oversees the petroleum sector and the National Petroleum Institute are empowered to:
  - a) Monitor the actions undertaken by the operator in order to restore the situation to its prior condition;
  - b) Visit the scene of the accident as soon as the situation has been brought under control;
  - c) Carry out an independent investigation; and
  - d) Render assistance to other authorities that may be carrying out investigations on the same matter.

**CHAPTER XI** 

**FINAL PROVISIONS** 

Article 116 (Corruption Prevention)

- 1. The concessionaire shall cooperate with Government in the prevention of corruption.
- 2. The concessionaire and the Government shall take immediate disciplinary actions and legal measures to halt, investigate and prosecute in accordance with Mozambican law and other applicable legislation, any person suspect of corruption or untoward use of petroleum operation resources.

### Article 117 (Safety Zones)

- 1. The safety zone may be extended up to 500 meters on each side, of the outer limits of a Petroleum Infrastructure.
- 2. In areas beyond the land territory and internal waters of the Republic of Mozambique, no protection and safety zones may be established for any oil or gas pipeline unless they are considered as part of an infrastructure.
- 2. Without prejudice to the applicable legislation, the access to facilities neighbouring areas by third parties, along the protection and safety zone, is subject to a prior consent from the infrastructure operator or holder and approval by the National Petroleum Institute.

# Article 118 (Norms, Instructions, Administrative Directives)

- 1. The Minister who oversees the petroleum sector may approve administrative norms or measures necessary for the conduct of petroleum operations.
- 2. The National Petroleum Institute may issue notices containing orders and instructions in respect of the conduct of petroleum operations.
- 3. As a measure of strict safety and with the aim of concluding an exceptionally danger activity, the public authorities may impose the suspension of certain referenced activities.
- 4. Orders, as well as specific administrative instructions, shall take due regard of their potential commercial consequences.

5. The operator shall inform its staff, and of to those of its contractors the orders issued by the National Petroleum Institute.

#### ANNEX A

- a) Discovery Area a part of a contract area according to Exploration and Production Concession Contract, whose limits contains all or part of the geological structure outlined on the basis of seismic data, geophysical and sampling, where a discovery is located;
- b) Block Part of a sedimentary basin formed by a vertical prism of an indefinite depth, with a polygonal surface defined by the geographical coordinates of its vertexes, where petroleum exploration and production activities are carried out;
- c) **BOE** means the equivalent to 159 (hundred and fifty nine) litres of brut petroleum, in atmospheric conditions and 15 (fifteen) Celsius Degree, or the equivalent to brut petroleum barrels at the account of one brut petroleum barrel to each six thousand (6,000) cubic feet of standard natural gas.
- **d) Wellhead** the fitting at the top of the surface casing of the well connected to the inlet flange of the first valve after the wellhead production manifold;
- e) Concessionaire any entity which holds the right to carry out petroleum operations pursuant to a concession contract or any other legal instrument through which the Government has granted a right to under petroleum operations;
- **f) Declaration of Commerciality** a report notifying the Government which concludes, on the basis of the appraisal carried out by the concessionaire of all relevant data, that a petroleum deposit is or not commercially viable;
- **g) Documentation** information, data, analysis, interpretation and results relating to petroleum operations, in paper or electronic format;
- h) Affiliated company means in relation to any person that constitutes the concessionaire, any parent company that directly or indirectly controls such person, or any company that is directly or indirectly is controlled by that person, or any company that, direct or indirectly is controlled by such parent company.

For the purposes of the above definition it is considered that:

- a company that is directly controlled by another company or companies when these hold shares or other participating interests in the equity capital of that they represent, jointly, more than 50% (fifty percent) of the voting rights on the general assembly; and
- a certain company is indirectly controlled by a company or companies (parent company or companies), when it is possible to identify a series of companies starting from the parent company or companies and ending with such certain company, related in such a form that each of the companies of that series, with the exception of the parent company or companies, is directly controlled by one or more companies that precede it in the series.
- i) **Decommissioning Fund** fund established to cover the costs of associated with the preparation and implementation of decommissioning;
- **j) Associated Natural Gas** –natural gas which exists in a solution with crude oil or found at the top of the petroleum deposit, but during the separation and production becomes gaseous under normal atmospheric conditions;
- **k) Profit Petroleum** that portion of disposable petroleum, in excess of cost petroleum, which is allocated to the concessionaire and to the government under the terms of the concession contract for exploration and production;
- **I) Operator** the holder of the rights to conduct petroleum operations or the company performing the petroleum operations on behalf of such holder, which is responsible for complying with the provisions of this Regulation;
- m) Commercial Appraisal Period applicable to a discovery area and it means the period starting from the moment when the appraisal report referred to the appraisal program pertaining to the discovery of natural gas excluding the associated natural gas that has been submitted by the concessionaire;
- **n) Exploration Period** means any period of relevant research provided for in the Concession;
- Cost Petroleum means the parcel of produced petroleum at disposal of the concessionaire to recover the costs and expenses incurred in carrying out the petroleum operations, as stipulated in the concession agreement;
- **p) Available Petroleum** produced petroleum balance after deduction of petroleum allocated to satisfy the tax payment obligation for the Petroleum Production;
- **q) Petroleum Produced** Petroleum which has been extracted from a Petroleum Deposit and initially separated and processed and delivered at the

Delivery Point appropriate for onwards Transportation in bulk or through an oil or gas pipeline. The same applies to "Crude Oil Produced", "Condensate Produced" and "Natural Gas Produced" as the case may be;

- r) Well- a well in the subsoil of the land surface or the seabed by drilling as part of Petroleum operations performed for the purpose of penetrating Petroleum bearing strata, except for drilling conducted for geoscience calibration purposes;
- s) Appraisal Well a well drilled in the course of carrying out an appraisal programme;
- t) Delivery Point means, in the case of Natural Gas, the inlet flange of the transportation gas pipeline and, in the case of Crude Oil, the inlet flange of the lifting oil tanker or, in both cases, an any other place that will be agreed by the MIREME;
- u) Appraisal Program a program, subsequent to a discovery of petroleum in the concession contract area, which aims to delineate the petroleum deposit to which that discovery relates in terms of thickness and lateral extent and to estimate the quantity of recoverable petroleum existent therein. Such a program may include a seismic survey or appraisal Wells drilled to a sufficient depth so as to penetrate the deposits being appraised, or both;
- v) Management System organization, procedures, processes and resources that are necessary to ensure compliance with legal provisions, as provided by this Regulation;

#### w) Flammable Substances:

- I. substances which, in liquid or semi-solid state, have an ignition point no higher than + 55°C and, regardless of the ignition point, motor fuel and fuel oil (flammable liquid);
- II. [II.] gas that after being ignited, will burn in air (flammable gas);

### **ANNEX B**

### Fees

Identification of Procedure	Fee Rate
Filing an application for the award of rights to conduct petroleum operations	2 000 000,00 MT
Handling of an application for renewal of a concession contract	500 000,00 MT
Evaluation of the application for extension of the exploration period in a concession contract	125 000,00 MT
Development plan assessment	1 000 000,00MT
Review of the Development Plan	125 000,00 MT
Authorization for the commencement of operations of facilities	500 000,00MT
Approval of the decommissioning plan	500.000,00 MT