



Republic of Mauritius

Republic of Seychelles

Environmental Code of Practice for the Joint Management Area

Prepared by the Governments of The Republic of Mauritius and the Republic of Seychelles

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A CODE

Determined in accordance with Article 8 and Article 12 of the Agreement Concerning the Establishment of a Joint Management Area in the Mascarene Plateau Region, to provide for the sustainable management of the natural resources, seabed and marine environment of the Joint Management Area.

PART 1 PRELIMINARY

ARTICLE 1

SHORT TITLE

This Code may be cited as the JMA Environmental Code of Practice 2013.

ARTICLE 2

INTERPRETATION

In this Code, unless the context otherwise requires:

"Activity" means an activity referred to in Article 4 of this Code;

"Authority" means the Designated Authority established in Article 4 of the Agreement Concerning the Establishment of a Joint Management Area in the Mascarene Plateau Region ('the JMA Agreement');

"Best Available Technique ('BAT')" means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole -

- (a) 'techniques' shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;
- (b) 'available' techniques shall mean those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages; and,
- (c) 'best' shall mean most effective in achieving a high general level of protection of the environment as a whole;

"Best Practicable Environmental Option ('BPEO')" means the option that provides the most environmental benefits or the least damage for the environment, as a whole, at acceptable cost, in the long term as well as the short term;

"Contracting State" means Republic of Mauritius or Republic of Seychelles, as the context requires;

"Contractor" means a corporation, company or other legal entity or entities with limited liability that enter into a contract with the Designated Authority and which are duly regulated;

"Commission" means the Joint Commission established under Article 4 of the JMA Agreement;

unless the context otherwise requires "impact" includes, but is not limited to -

- (a) any positive or adverse impact; and
- (b) any temporary or permanent impact; and
- (c) any past, present, or future impact; and,
- (d) any cumulative impact that arises over time or in combination with other impacts;

"Impact assessment" means the impact assessment described in Part 3;

"Joint Management Area" or "JMA" has the meaning as stated in Article 3 of the JMA Agreement;

"Licensed corporation" means a corporation licensed by the Designated Authority to carry out natural resource activities in the JMA;

"Major environmental incident" means any unforeseen environmental event, which presents a serious threat to the health and safety of people and the marine environment, or causes disruption to the normal operation of a facility, or causes (or is likely to cause) pollution or other unforeseen damage to the marine environment;

"Marine environment" means the natural environment, including ecosystems and their constituent parts and all natural resources, of -

- (a) the Joint Management Area; and
- (b) the Exclusive Economic Zone of Mauritius; and
- (c) the Exclusive Economic Zone of Seychelles; and,
- (d) the waters superjacent to and beyond the continental shelf;

"Marine plan" means a document –

- (a) that has been prepared and adopted for all or any specified part of the JMA by the Authority; and,
- (b) states the policies of the Authority, however expressed, for and in connection with the sustainable development of the defined area of the marine plan;

"Mauritius" means the Republic of Mauritius and includes -

- (a) all the territories and islands which, in accordance with the laws of Mauritius, constitute the State of Mauritius;
- (b) the territorial sea of Mauritius; and,
- (c) any area outside the territorial sea of Mauritius which, in accordance with international law, has been or may hereafter be designated under the laws of Mauritius as an area including the Continental Shelf within which the rights of Mauritius with respect to the sea, the sea-bed and sub-soil and their natural resources may be exercised;

"Minerals" means any naturally occurring element, compound or substance, amorphous or crystalline (including liquid crystalline compounds), formed through geological or biogeochemical processes and any naturally occurring mixture of substances, including in the form of coal, clay, evaporates, gravel, limestone, oil-shale, sand, shale, rock, and polymetallic nodules;

"Natural resources" means the mineral, petroleum and other non-living resources of the seabed and subsoil of the continental shelf together with living organisms belonging to sedentary species;

"Natural resource activities" means all activities authorised or contemplated under a contract, permit or licence that are undertaken to explore and exploit natural resources in the JMA including development, initial processing, harvesting, production, transportation and marketing, as well as the planning and preparation for such activities;

"Offshore installation" includes -

- (a) any artificial structure (including a floating structure that is not a ship) used or intended to be used in or on, or anchored or attached to, the seabed for the purpose of the exploration for, or the exploitation or associated processing of, natural resources; and,
- (b) a pipeline permanently attached to an offshore installation;

"Operated", in relation to an offshore installation, means used in or on, or anchored or attached to, the seabed for the purpose of the exploration for, or the exploitation, associated processing or storage of, natural resources;

"Operator", in relation to an offshore installation, includes -

 (a) any person having a right, privilege or licence to explore for or exploit natural resources in connection with which the installation is being, has been or is to be used;

- (b) any manager, lessee, licensee or operator of the installation;
- (c) any agent or employee of the operator, manager, lessee, licensee or operator of the installation; and,
- (d) any person in charge of any operations connected with the installation;

"Person" means any individual or partnership or any public or private body, whether corporate or not, including a State of any of its constituent subdivisions;

"Sedentary species" means living organisms that, at their harvestable stage-

- (a) are immobile on or under the seabed; or,
- (b) are unable to move except in constant physical contact with the seabed or subsoil;

"Seychelles" means the territory of the Republic of Seychelles as defined in article 2 of the Constitution of the Republic of Seychelles;

"Ship" means every description of boat or craft used in navigation, whether or not it has any means of propulsion; and includes -

- (a) a barge, lighter, or other like vessel;
- (b) a hovercraft or other thing deriving full or partial support in the atmosphere from the reaction of air against the surface of the water over which it operates; and,
- (c) a submarine or other submersible;

"Special Drawing Rights ('SDRs')" means the reserve assets of the International Monetary Fund from which member nations may draw in proportion to their contribution to the Fund;

"Structure" means any building, equipment, or device including -

- (a) an offshore installation, artificial island, or floating platform; and,
- (b) a ship used in connection with any offshore installation, artificial island, or floating platform.

"Sustainable management" means managing the use, development, and protection of natural resources in a manner or at a rate that enables people to provide for their economic well-being whilst:

- (a) sustaining the potential of natural resources (excluding minerals) to meet the reasonably foreseeable needs of future generations;
- (b) safeguarding the life-supporting capacity of the environment; and,

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

ARTICLE 3

SCOPE AND PURPOSE

- 1. This Code and its Annexes shall apply to the JMA.
- 2. The purpose of this Code is to ensure management of the use, development and protection of the natural resources of the JMA in a manner that enables the contracting States to utilise the resources of the JMA for the benefit of their people, whilst:
 - (a) protecting the marine environment and dependent and associated ecosystems and taking all appropriate measures to protect and preserve biological diversity and rare or fragile ecosystems, as well as species of wild fauna and flora and their habitats;
 - (b) sustaining the potential of natural resources to meet the needs of future generations;
 - (c) safeguarding the life-supporting capacity of the environment; and,
 - (d) avoiding, remedying, or mitigating any adverse effects of activities on the environment.
- 3. All persons and operators must comply with this Code and activities in the JMA shall be planned and conducted:
 - (a) so as to minimise adverse impacts on the marine environment;
 - (b) so as to avoid:
 - (i) significant adverse impacts on the marine environment;
 - detrimental changes in the distribution, abundance or productivity of species or populations of species of fauna and flora;
 - (iii) further jeopardy to endangered or threatened species; or,
 - (iv) degradation of, or substantial risk to, areas of ecological significance or scientific interest;
 - (c) on the basis of information which allows prior assessment of, and informed judgment about, their possible impacts on the marine environment.

PART 2 REGULATION OF ACTIVITIES IN THE JOINT MANAGEMENT AREA

ARTICLE 4

REGULATION OF ACTIVITIES

- 1. No person or operator shall undertake any natural resource activity or an activity described in paragraph 2 of this Article in the JMA without the prior authorisation of the Authority.
- 2. The activities referred to in paragraph 1 of this Article include:
 - (a) the construction, long-term mooring or anchoring, placement, alteration, extension, removal, or demolition of a structure or part of a structure on or under the seabed;
 - (b) the construction, placement, alteration, extension, removal, or demolition of submarine pipelines on or under the seabed;
 - (c) the placement, alteration, extension, or removal of submarine cables on or from the seabed;
 - (d) the causing of vibrations (other than vibrations caused by the normal operation of a ship) and explosions in a manner that is likely to have an adverse effect on marine life;
 - (e) the disturbance of the seabed or subsoil of the continental shelf in a manner that is likely to have an adverse impact on the habitats and living marine resources therein;
 - (f) the deposit of anything, including the dumping of waste or organism in, on, or under the seabed; and,
 - (g) any other activity that may be determined by the Authority.
- 3. For the purpose of paragraph 1, the activities referred to in this Article shall also include any change in those activities whether the change arises from an increase or decrease in the intensity of an existing activity, from the addition of an activity, the decommissioning of a facility, or otherwise.
- 4. Any person or operator authorised by the Authority to undertake an activity in the JMA is subject to the following:

- (a) a general obligation to avoid, remedy, or mitigate the adverse impacts of the activity on the environment; and,
- (b) an obligation to provide -
 - (i) training to, and supervision of, all employees who are engaged in an activity in the JMA in order to ensure compliance with this Code; and,
 - (ii) sufficient resources to the employees to ensure compliance with thisCode, including establishing appropriate management systems;
- (c) an obligation to take remedial action in the event of any incident which may or has given rise to adverse impacts on the environment;
- (d) an obligation to notify the Authority, by the fastest means of communication available and with the highest possible priority, of the occurrence of any incident which may or has given rise to adverse impacts on the environment and any remedial actions taken to address those impacts and their effectiveness; and
- (e) an obligation to contribute to the marine environment fund unless otherwise decided by the Authority.

PREVENTION MEASURES

- 1. Any person or operator undertaking an activity in the JMA described in Article 4 shall implement reasonable preventative measures that are designed to reduce the risk of adverse environmental damage.
- 2. Preventative measures may include, but are not limited to:
 - (a) application of Best Available Technique ('BAT') and Best Practicable Environmental Option ('BPEO') during project planning, design, implementation and decommissioning;
 - (b) incorporation of appropriate structures or equipment into the design and construction of facilities and means of transportation;
 - (c) incorporation of appropriate procedures into the operation or maintenance of facilities and means of transportation;
 - (d) specialised training of personnel; and,
 - (e) any other specific measure that may be determined by the Authority.

PART 3 ENVIRONMENTAL ASSESSMENT AND PLANNING

ARTICLE 6

INITIAL SCREENING ASSESSMENT

1. Any person or operator proposing an activity referred to in Article 4 shall submit to the Authority for its consideration, an initial screening assessment in respect of the impacts of such activities on the marine environment.

ARTICLE 7

PRELIMINARY ENVIRONMENTAL ASSESSMENT

- 1. Where an initial screening assessment carried out pursuant to Article 6 indicates that further assessment is required, or indicates that there is uncertainty concerning the nature or extent of potential impacts or, where a comprehensive environmental assessment is required in accordance with Article 8, a preliminary environmental assessment shall be prepared and submitted for consideration by the Authority.
- 2. A preliminary environmental assessment conducted in accordance with paragraph 1 of this Article shall provide sufficient detail to identify key impacts, their magnitude and significance, and to evaluate their importance for decision-making and shall include:
 - (a) a description of the proposed activity, including its purpose, components, location, duration and intensity; and,
 - (b) consideration of possible alternatives to the proposed activity (e.g. location, process & design, scheduling, inputs, 'no project') and any impacts that the activity may have, including consideration of cumulative impacts in the light of existing and known planned activities.
- 3. If the Authority determines that a preliminary environmental assessment indicates that a proposed activity is likely to have no more than a minor or transitory impact, it may approve the activity, provided that appropriate environmental management plans and procedures are established to provide for the assessment and verification of the impact of the activity.

COMPREHENSIVE ENVIRONMENTAL ASSESSMENT

- 1. Where a preliminary environmental assessment carried out pursuant to Article 7 indicates, or where the Authority otherwise determines, that a proposed activity is likely to have more than a minor or transitory impact, a comprehensive environmental assessment shall be prepared by the person or operator and submitted for the approval of the Authority.
- 2. Notwithstanding Articles 6 and Article 7 a comprehensive environmental assessment shall be conducted with respect to the following activities:
 - (a) exploration for petroleum resources other than geophysical surveys;
 - (b) field development and production of petroleum resources;
 - (c) field development and production of mineral resources; and,
 - (d) exploitation of other natural resources.
- 3. A comprehensive environmental assessment conducted in accordance with paragraph 1 of this Article shall include, but not necessarily be limited to:
 - (a) a description of the proposed activity including its purpose, location, duration and intensity, and possible alternatives to the activity, including the alternative of not proceeding, and the consequences of those alternatives;
 - (b) a description of the pre-activity (baseline) environmental conditions with which predicted changes are to be compared and a prediction of the future environmental conditions in the absence of the proposed activity;
 - a description of the methods and data used to forecast the impacts of the proposed activity;
 - (d) estimation of the nature, extent, duration, and intensity of the likely direct impacts of the proposed activity;
 - (e) identification of unavoidable impacts of the proposed activity;
 - (f) consideration of possible indirect or second-order impacts of the proposed activity;
 - (g) consideration of the short-term, medium-term and long-term effects of the proposed activity on existing uses and values in the JMA;

- (h) consideration of irreversible and cumulative impacts of the proposed activity in the light of existing activities and other known planned activities;
- (i) identification of measures, including monitoring programmes, that could be taken to minimise or mitigate impacts of the proposed activity and to detect unforeseen impacts that could provide early warning of any adverse effects of the activity as well as measures to deal promptly and effectively with accidents;
- (j) an identification of gaps in knowledge and uncertainties encountered in compiling the information required under this paragraph; and,
- (k) a non-technical summary of the information provided under this subsection.
- 4. Every comprehensive environmental assessment shall contain the information specified in paragraph 3:
 - (a) in such detail as corresponds to the scale and significance of the impacts that the activity may have on the environment and existing interests; and,
 - (b) in sufficient detail to enable the Authority to understand the nature of the activity and its impacts on the environment and existing interests.

CHANGES TO EXISTING ACTIVITIES

1. The assessment procedures contained in this Part shall apply to any change to an existing activity that has been approved by the Authority, irrespective of whether or not the change arises from an increase or decrease in the intensity of an existing activity, or from the addition of an activity, or arises from the decommissioning of a facility, or otherwise.

2. Where the Authority considers that significant changes to the environmental impact of the activity will result from a change of activity, the person or operator authorised to carry out the activity shall be required to undertake a separate comprehensive environmental assessment concerning the relevant activity.

ARTICLE 10

ENVIRONMENTAL MANAGEMENT SYSTEMS

All activities for which a comprehensive environmental assessment is required shall be managed in accordance with an Environmental Management System (EMS), consistent with

ISO 14001 or other similar internationally recognised standard, a key component of which shall be the development and implementation of an Environmental Management Plan (EMP).

ARTICLE 11

ENVIRONMENTAL MONITORING

- 1. Regular and effective monitoring shall be undertaken by the person or operator authorised to carry out an on-going activity for the purpose of assessing the impacts of such activity, including the verification of predicted impacts.
- 2. Regular and effective monitoring shall be undertaken by the person or operator authorised to carry out an activity to facilitate early detection of possible unforeseen effects of activities carried out both within and outside the JMA on the marine environment.
- 3. The person or operator authorised to carry out an activity shall maintain records of all monitoring undertaken in accordance with this Article, which shall be made available for inspection by the Authority at any time.

PART 4 ENVIRONMENTAL DAMAGE AND LIABILITY

ARTICLE 12

ENVIRONMENTAL DAMAGE

- 1. Any person or operator undertaking any activity in the JMA shall ensure that such activity is undertaken in order to minimise disturbance of and impacts to marine habitats and species and:
 - (a) that such activity shall be undertaken so as to avoid or minimise disturbance to critical habitats of vulnerable, endangered or critically endangered species¹ or any species designated as legally protected by the Authority or under the national laws of the Contracting States;
 - (b) facilities should be designed to minimise attraction to wildlife; and,
 - (c) facilities and infrastructure should not be constructed in a manner that would impair wildlife movement within the JMA.
- 2. Where activities are undertaken in, or in the vicinity of, sensitive environments or areas of the JMA that have been designated by the Authority in a marine plan as areas that are important and subject to specific requirements:
 - (a) the physical footprint of all temporary and permanent facilities shall be minimised to reduce environmental impacts;
 - (b) activities shall be undertaken so as to avoid large-scale physical disturbance; and,
 - (c) on completion of operations, disturbed sites shall be rehabilitated to the predisturbed state to the best extent practicable.
- 3. Where physical disturbance is unavoidable, long-term or irreversible, consideration should be given to other forms of environmental remediation or enhancement, including in adjoining areas with the object and purpose being to ensure that such measures achieve a zero net environmental footprint.

¹ As defined under the categories used in the most recent release of the IUCN Red List of Threatened Species

- 4. Any person or operator that causes an imminent threat of environmental damage arising from a major environmental incident, must immediately:
 - (a) take all practicable steps to prevent the damage; and,
 - (b) notify all relevant details to the Authority.
- 5. The Authority may serve a notice on the Operator that:
 - (a) describes the threat;
 - (b) specifies the measures required to prevent the environmental damage occurring; and,
 - (c) requires the Operator or person to take those measures, or measures at least equivalent to them, within the period specified in the notice.
- 6. Any person or operator of an activity that has caused actual environmental damage, must immediately:
 - (a) take all practicable steps to prevent further damage; and
 - (b) notify all relevant details of the damage and the steps taken to the Authority.
- 7. Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures.

LIABILITY FOR DAMAGE ARISING FROM MAJOR ENVIRONMENTAL INCIDENTS

- 1. The principle of Strict Liability apply to the person or operator in respect of damage to the marine environment that arises from a major environmental incident.
- 2. When a major environmental incident arises from the activities of two or more operators, they shall be jointly and severally liable, except that an Operator which establishes that only part of the environmental incident results from its activities shall be liable in respect of that part only.

EXCEPTIONS FROM LIABILITY

A person or operator shall not be liable under Article 13 for damage to the marine environment arising from a major environmental incident where it is proven that the incident was caused by:

- (a) an act or omission necessary to protect human life or safety;
- (b) an event of an exceptional character, which could not have been reasonably foreseen, either generally or in the particular case, provided all reasonable preventative measures have been taken that are designed to reduce the risk of environmental emergencies and their potential adverse impact;
- (c) an act of terrorism; or,
- (d) an act of belligerency against the activities of the operator.

ARTICLE 15

RESPONSE ACTIONS

- 1. All persons and operators shall take prompt and effective response action to environmental emergencies arising from their activities.
- 2. Any person or operator that fails to take prompt and effective response action to prevent potential, or to respond to actual environmental damage arising from major environmental incidents arising from or connected to their activities, shall be liable to pay the costs of any response action taken by Contracting States.

ARTICLE 16

COMPENSATION

- 1. In addition to the costs associated with response actions referred to in Article 15, the person or operator shall pay any business or individual compensation where such business or persons have incurred expense, or suffered economic loss or property damage as a result of a major environmental incident.
- 2. The compensation payable under paragraph 1 of this section shall be commensurate with the loss incurred and shall take into account *inter alia* the following criteria:

- (a) the geographic proximity between the claimant's activities and the contamination;
- (b) the degree to which the claimant is economically dependent on an affected natural resource;
- (c) the extent to which the claimant's business forms an integral part of economic activities in the area which is directly affected by the contamination;
- (d) the scope available for the claimant to mitigate his loss; and,
- (f) the effect of any concurrent causes contributing to the claimant's loss.

ENVIRONMENTAL REMEDIATION

- 1. Where environmental damage has been caused by a person or Operator referred to Article 12, the Authority must estimate of the needs and costs of restoring the affected natural resources or environmental services.
- 2. The person or Operator responsible for the damage must submit proposals, within a time specified by the Authority, for measures that will achieve the remediation of the environmental damage, including:
 - (a) the measures necessary for remediation of the damage, together with a justification;
 - (b) the period within which those measures must be taken; and,
 - (c) any additional monitoring or investigative measures that the responsible operator must carry out during remediation.
- 3. The Operator shall bear the full costs for the preventive and remedial actions taken pursuant to Articles 12 and 17 respectively.

ARTICLE 18

LIMITS OF LIABILITY

1. The person or operator shall be entitled to limit liability for each installation and each incident to the amount of two hundred million dollars (US\$200,000,000.00).

- 2. Notwithstanding paragraph 1 of this Article, this Article shall not affect:
 - (a) the liability or right to limit liability under any applicable international limitation of liability treaty; or,
 - (b) the application of a reservation made under any such treaty to exclude the application of the limits therein for certain claims.
- 3. Liability shall not be limited where it is proved that the major environmental incident resulted from an act or omission of the operator, committed with the intent to cause such emergency, or recklessly and with knowledge that such an incident would probably result from the act or omission.

INSURANCE AND OTHER FINANCIAL SECURITY

All persons or operators undertaking activities in the JMA pursuant to Article 4 shall maintain, and demonstrate to the satisfaction of the Authority, insurance or other financial security, such as the guarantee of a bank or similar financial institution, to cover liability under Article 15 up to the applicable limits set out in Article 17.