#### **ENVIRONMENTAL IMPACT ASSESSMENT PROCEDURE**

The Government of the Republic of the Union of Myanmar

## Ministry of Environmental Conservation and Forestry

Notification	n No/ 2013	
Nay Pyi Taw, the	Day of	, 1374 M.E
(	, 2013)	

The Ministry of Environmental Conservation and Forestry, in exercise of the power conferred by sub-section (b) of Section 42 of the Environmental Conservation Law, according to Notification No. 20/2013 of the Union Government dated 13 March 2013, hereby issues the following Procedure.

## CHAPTER I.

#### Title and Definitions

- 1. This Procedure shall be called the **Environmental Impact Assessment (EIA) Procedure**.
- 2. The expressions contained in this Procedure shall have the same meanings as are assigned to them under the Environmental Conservation Law and Rules. In addition thereto, the following expressions shall have the meanings given hereunder:
  - (a) Alternatives in relation to a proposed Project, means different means of meeting the general purpose and requirements of the Project, which may include alternatives to:
    - 1) the property on which or location where it is proposed to undertake the Project,
    - 2) the type of Project to be undertaken,
    - 3) the design or layout of the Project,
    - 4) the technology to be used in the Project,
    - 5) the operational aspects of the Project, and
    - 6) any other substantive characteristic or aspect of the Project as deemed necessary or appropriate by the Ministry.
  - **(b) Adverse Impact** means any adverse environmental, social, socio-economic, health, occupational safety or health effect suffered or borne by any entity, natural person, or natural resource, including, but not limited to, the environment, flora and fauna, where such effect is attributable in any degree or extent to, or arises in any manner from, any action or omission on the part of the Project Proponent, or from the design, development, construction, implementation, maintenance, operation, or decommissioning of the Project or any activities related thereto.
  - (c) Best Available Techniques or 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 avoidance, prevention, reduction, mitigation and compensation as 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, where:

- 'Best' shall mean most effective in achieving a high general level of protection of the environment as a whole;
- 'Available' techniques shall mean those developed on a scale which allow implementation in the relevant industrial sector, under economically and technically viable conditions taking into consideration the cost and advantages, as long as they are reasonably accessible to the operator; and
- **'Techniques'** shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.
- **(d) Biodiversity** means the variability among living organisms from all sources including, inter alia, terrestrial, atmospheric, and marine and other aquatic ecosystems and the ecological complexes of which any such ecosystem is a part; this includes diversity within species, between species, and of ecosystems.
- **(e) Complex Project** refers to an investment Project that has substantial impacts on the environment and society, which may include impacts beyond the borders of the jurisdiction under consideration, or a cumulative impact on other investment projects, or in which complex technology is applied.
- (f) Construction Phase EMP means a detailed and comprehensive Environmental Management Plan (EMP) for the construction phase of a Project. Such plan shall present all relevant commitments, Emission Limit Values, Environmental Quality Standards and other environmental requirements and include a description of the construction works, present an overview of Adverse Impacts, present mitigation measures and monitoring programs together with time schedules, overview maps, images, aerial photos, satellite images, site layout plans, cross-sections, transects, environmental management and monitoring sub-plans for each construction site, thematic sub-plans, and management procedures as appropriate.
- **(g) Cumulative Impact** in relation to a Project, means the impact or impacts of a Project that in itself or themselves may not be significant but may become significant when added to the existing and potential impacts eventuating from similar or diverse Projects or undertakings in the same geographic area or region.
- (h) Department means the Environmental Conservation Department of the Ministry.
- (i) EIA Type Project means a Project judged by the Ministry as being likely to have potential for Adverse Impacts.
- (j) Emission means the direct or indirect release of any substance, radiation, vibration, heat or noise from individual or diffuse sources into the air, water, land or any subterranean area. Emissions include emissions of solid waste, effluent, gas, noise, odor, light, radiation, vibration or heat.
- **(k) Emission Limit Values** or **ELV** is a figure specifying the concentration or load of a pollutant allowed to be emitted or discharged to the environment from a specific installation in a given period of time or per unit of production.

- (I) Environmental Compliance Certificate or ECC is a legal document through which the Ministry approves an Initial Environmental Examination (IEE) Report or an EIA Report, or an EMP.
- (m) Environmental Impact means the probable effects or consequence on the natural environment and people of a proposed Project or businesses or activities or undertaking. Impacts can be direct or indirect, cumulative, and positive or adverse or both. For purposes of this Procedure, Environmental Impacts include occupational, social, socio-economical, community health, and safety issues. Social impacts that are in the nature of Involuntary Resettlement or which relate to Indigenous People, however, shall be dealt with in accordance with Article 7.
- (n) EIA Report means a report comprising a systematic assessment of a proposed activity or project that is prepared to aid in determining whether such activity or project has the potential significantly to affect the environment, humans and other living things, including socio-economic impacts, and in deciding whether such activity or project should be allowed or not. The form, content and structure of the report shall be in accordance with the Ministry's requirements and guidelines and international best practice, and include the EMP.
- **(o) EIA Report Review Body** means that body to be formed by the Ministry in accordance with Article 58 of Environmental Conservation Rules, comprising technical experts from relevant government departments, government organizations, technical organizations and civil society responsible to review and provide comments and recommendations on an EIA Report.
- **(p) EMP** means a document contemplated in Chapter II with form, content and structure in accordance with the Ministry's requirements and guidelines, which describes the measures to be taken for avoiding, preventing, mitigating, monitoring and compensating all Adverse Impacts resulting from the design, construction, implementation, operation, maintenance, decommissioning, closure and post closure or other aspects of the proposed Project or business or activity.
- (q) Environmental Quality Standard or EQS is a measure of the state of a specific environmental medium with regard to a specific pollutant that represents the upper limit of acceptability designed to protect human health or the ecosystem.
- **(r) Good Practice** means that practice which is recognized by a consensus of relevant stakeholders (including without limitation government, industry, labour, financiers, and academia) as having been adopted by leading, reputable companies of international standard, which is capable of being adhered to within the Republic of the Union of Myanmar, and which, when carried out by or in respect of the Project, can be expected further to reduce the Adverse Impacts arising from the Project and activities related thereto.
- **(s) IEE Type Project** means a Project judged by the Ministry to have some Adverse Impacts, but of lesser degree and/or significance than those for EIA Type Projects.
- (t) Indigenous People means people with a social or cultural identity distinct from the dominant or mainstream society, which makes them vulnerable to being disadvantaged in the processes of development.
- (u) IEE Report means a report comprising a systematic assessment of a proposed activity or project that is prepared to aid in determining whether such activity or project has the potential significantly to affect the environment, humans and other

living things, including socio-economic impacts, and in deciding whether such activity or project should be allowed or not. The form, content and structure of the report shall be in accordance with the Ministry's requirements and guidelines and international best practice, and include the EMP.

- **(v) Involuntary Resettlement** means the mandatory physical displacement of a Project Affected Person from the PAP's home arising from a Project, or the unavoidable loss by a PAP of productive or income-generating assets occasioned by a Project.
- (w) Law means the Environmental Conservation Law and future amendments of the Law.
- (x) Ministry means the Ministry of Environmental Conservation and Forestry and, where the context requires, includes as relevant its Departments and/or offices at national, regional, state, township and municipal levels.
- (y) Operational Phase EMP means a detailed and comprehensive EMP for the operational phase of a Project. Such plan shall present all relevant commitments, Emission Limit Values, Environmental Quality Standards and other environmental requirements. The plan shall include a description of the Project operations, installations, and infrastructure, and shall present an overview of Adverse Impacts, present mitigation measures together with time schedules, overview maps, images, aerial photos, satellite images, site layout plans, cross-sections, transects, environmental management and monitoring sub-plans for each Project site, thematic sub-plans, and management procedures as appropriate.
- (z) Project means any commercial, economic, agricultural, social, academic, scientific, political or other project, activity, program, business, service or undertaking, whether regarded individually or in the aggregate, the performance of which [requires any approval or is licensed, restricted, or otherwise regulated to any extent by any part of the Union Government and which] may have an Adverse Impact.
- (aa) Project Affected Person or PAP means a natural person, legal entity, or organization that is, or is likely to be, directly or indirectly affected by a Project or a proposed Project, including without limitation effects in the nature of legal expropriation of land or real property, changes of land category, and impacts on the ecological and environmental systems in the settlement areas of such person, entity or organization.
- **(bb) Project Owner** means any natural person, legal entity, or organization, from the public or private sector, undertaking a Project or any aspect of a Project (including study, survey, design, development, pre-construction, construction, operation, decommissioning, closure, and post closure) within the territorial borders of the Republic of the Union of Myanmar and during the period of such undertaking which has an ownership interest (legal or equitable) in the Project, or which intends (or could be reasonably be expected to intend) to derive financial or other benefits from the Project of the sort which an owner would ordinarily derive.
- (cc) Project Proponent means any natural person, legal entity, or organization, from the public or private sector, intending to undertake a Project or any aspect of a Project (including study, survey, design, development, pre-construction, construction, operation, decommissioning, closure, and post closure) within the territorial borders

of the Republic of the Union of Myanmar, and for the avoidance of doubt shall include the Project Owner at such time as the undertaking of such Project has commenced.

- (dd) Project Proposal means a written document, in form, content and structure in accordance with the Ministry's requirements and guidelines, accurately setting forth the key aspects and relevant details (including, inter alia, the nature and size of all known or foreseeable Adverse Impacts) of a Project which a Project Proponent wishes to develop or invest in.
- (ee) Rules means the Environmental Conservation Rules.
- (ff) Residual Impacts means predicted or actual Adverse Impacts that remain after mitigating measures have been applied.
- (gg) Scoping means the process contemplated in Chapter V for determining the scope of the EIA (i.e., the data that need to be collected and analyzed to assess the potential Adverse Impacts of a Project) and producing a terms of reference (TOR) for preparation of an EIA Report.
- **(hh) Screening** means the initial assessment that is made pursuant to this Procedure to determine whether an IEE or an EIA is required to be carried out.

# CHAPTER II.

## Establishment of the Environmental Impact Assessment Process

- 3. Pursuant to Section 7 of the Law and Articles 52 and 53 of the Rules, all Projects undertaken in the Republic of the Union of Myanmar by any ministry, government department, organization, corporation, board, development committee, local government or authority, company, cooperative, institution, enterprise, firm, partnership or individual having the potential to cause significant Adverse Impacts, are required to undertake IEE or EIA and to obtain an ECC in accordance with this Procedure.
- 4. The Ministry shall be the designated party responsible for the application and interpretation of this Procedure.
- 5. The Ministry shall, under the guidance of the Environmental Conservation Committee, form the EIA Report Review Body as a standing body.
- 6. The EIA Report Review Body shall have the following responsibilities:
  - a) When requested by the Ministry, to review the EIA of any Project.
  - b) Within the timeframe prescribed by the Ministry, to prepare an EIA Review Report in regard to an EIA Report.
  - c) The Ministry may, in each case, prescribe the scope and content of the EIA Review Report. Such scope and content may include assessments of the following questions:
    - (i) Does the EIA Report comply with the Procedure (EIA Report structure, content, study methodology, public participation process, etc.)?
    - (ii) Does the EIA Report comply with the Scoping Report and TOR for the EIA?

- (iii) Does the EIA Report comply with explicit guidelines, standards, timing or criteria for review?
- (iv) Does the EIA Report recognize and consider the views of stakeholders?
- (v) Is the EIA Report complete and does it contain sufficient, suitable and reliable information?
- (vi) Have all applicable environmental requirements been adequately identified, addressed, referred to and fully complied with in the preparation and content of the EIA Report?
- (vii) Have all foreseeable Adverse Impacts been identified and addressed in the preparation and content of the EIA Report?
- (viii) Is it likely that the measures to prevent, mitigate or minimize Adverse Impacts of the Project specified in the EIA Report will ensure that the environmental requirements will be fully complied with?
- (ix) Are the measures to prevent or minimize pollution from the Project effective and based on BAT and Good Practice?
- (x) Are there any measures or procedures which are non-compliant or risk leading to non-compliance with environmental requirements?
- (xi) Can the Project as described and presented in the EIA Report be constructed and operated without causing unacceptable Adverse Impacts?
- d) The EIA Review Report shall identify any defects in the EIA investigations or the EIA Report and give recommendations as to which further studies, investigations, consultations or assessment that the Project Proponent must undertake and report.
- e) The EIA Report Review Body shall provide such other feedback and recommendations on any EIA Report as the Ministry may explicitly request.
- f) The EIA Review Report shall, where relevant, give recommendations on conditions of the ECC.
- g) If requested, the EIA Report Review Body shall present its findings at a meeting.
- 7. This Procedure does not address specific matters in relation to resettlement or in relation to Projects that may have an Adverse Impact on Indigenous People. Projects involving resettlement or potentially affecting Indigenous People shall additionally comply with separate procedures issued by responsible ministries, and in the absence of such procedures all such Projects shall adhere to international best practice on Involuntary Resettlement and Indigenous People.
- 8. For Projects and/or activities that already exist or in respect of which pre-construction or construction has already commenced when this Procedure is issued, each such Project or activity shall be required to undertake an environmental and/or social compliance audit, including on-site assessment, to identify past or present concerns related to that Project's or activity's Environmental Impacts, and, where required by the Ministry, such Project or activity shall take appropriate actions in accordance with the Law, the Rules, and other applicable laws of the Republic of the Union of Myanmar. Existing Projects and activities or Projects and activities that are under construction before the issuance of this Procedure shall develop an EMP within a timeframe prescribed by the Ministry and such EMP shall be subject to the review and approval of the Ministry.

- 9. The Ministry has the power and exclusive authority to:
  - a) define Project screening criteria;
  - b) approve technical guidelines for IEE and EIA;
  - c) review and approve IEE Reports;
  - d) provide guidelines for, and approve TOR of, EIA;
  - e) review and approve EIA Reports;
  - f) review and approve EMP, Construction Phase EMP and Operational Phase EMP;
  - g) determine and impose conditions applicable to any Ministry approval of an IEE, EIA or EMP;
  - h) monitor and enforce implementation of the EMP, including any amendments thereof occasioned once the detailed design of the proposed Project has been finalized or by or on account of experience during implementation of the Project;
  - require any Project to update its EMP and to submit such updated EMP to the Ministry for review and approval according to a schedule defined by the Ministry; and
  - j) perform other duties and functions relating to IEE/EIA as stipulated by the Union Government.
- 10. The Project Proponent shall arrange for appropriate public consultation through all phases of the IEE and EIA process as provided for in this Procedure.

## Requirements concerning organizations or persons undertaking EIA and IEE

- 11. Any organization or person who wishes to prepare an EIA or IEE shall apply to register with the Ministry. Such application shall include: name and contact address, profile of the organization or individual, as the case may be, profiles of its key personnel if the applicant is an organization, relevant experience of the organization and each of its key personnel in the field of environmental assessment, academic credentials, relevant certificates or accreditations, references from clients for whom the organization has performed environmental assessment work previously, and evidence of professional or other liability insurance covering the work and services to be performed by such organization or person. The applicant for registration shall be required to make payment of any fees and charges that may be required by the Ministry in connection with the application submission. Approved registrations shall be for a period of three (3) years. Three (3) months prior to expiration of the registration, a registrant can apply to the Ministry to extend such registration.
- 12. The Ministry will review the materials submitted by applicants seeking to be registered in accordance with Article 11 to determine their suitability to carry out such assessments. The Ministry may refuse to register any applicant which the Ministry, based upon the materials submitted by the applicant, deems to be unsuitable. Any applicant who has been refused registration may re-apply for registration after it has resolved or corrected the defect(s).
- 13. The Ministry may suspend or cancel the registration of any organization or person who has been registered in accordance with Article 11 or any prior requirements, and

may impose such other corrective or punitive measures as may be lawfully available to it, if the Ministry determines that such organization or person has violated any provision of Republic of the Union of Myanmar law, or if the assessments of such organization or person contain significant errors or are materially misleading or have not been prepared in accordance with recognized standards generally applicable to such work and services and/or relevant provisions of the Law, the Rules, this Procedure or other applicable Republic of the Union of Myanmar laws, or if the Ministry determines that at any relevant time there existed a conflict of interest which could have affected the impartiality of the work or conclusions of such organization or person and which was not previously revealed in writing to and waived by the Ministry.

- 14. No organization or person who is not registered with the Ministry shall prepare, submit or allow the submission to the Ministry of any assessment contemplated in this Procedure. No Project Proponent shall prepare or submit to the Ministry any assessment contemplated in this Procedure which has not been prepared by an organization or person duly registered with the Ministry in accordance with Article 11.
- 15. The Ministry shall maintain and publish from time to time a list of all organizations and persons who are registered with the Ministry for the preparation of assessments. The Ministry shall issue to each registered organization and person a confirmation of registration and, when necessary, a notification of suspension or termination of registration.
- 16. The Ministry shall assign duties and responsibilities in respect of this Procedure to the Department charged with implementing the EIA system in accordance with Article 7(m) of the Law and Article 51 of the Rules.

## CHAPTER III.

# Screening

- 17. The Project Proponent shall submit to the Department for Screening a Project Proposal completed in accordance with Ministry guidelines. Following the preliminary screening and verification that it contains all required documents and related materials, the Department shall determine the necessary level of environmental assessment and submit that determination to the Ministry. The Ministry shall determine whether the Project, according to the Annex 1 'Categorization of Economic Activities for Assessment Purposes':
  - a) is an EIA Type Project, or
  - b) is an IEE Type Project, or
  - c) is neither an EIA nor an IEE Type Project and therefore is not required to undertake any environmental assessment.
- 18. In making its determination for a Project as to the type of environmental assessment the Project will require, the Ministry will additionally consider the following factors on a Project or Project site specific basis:
  - a) protection of cultural or religious norms, and historical or religious heritage;
  - b) conservation and protection of biodiversity;

- c) introduction of exotic or alien species;
- d) adoption of new technologies;
- e) national security;
- f) climate change; and
- g) other factors as the Ministry may determine.
- 19. Within fifteen (15) days of receiving the complete Project Proposal, the Ministry shall determine the type of environmental assessment (EIA, IEE, or none) which the Project will require, and shall inform the Project Proponent in writing about its determination.
- 20. The selection of the type of projects, business or activities as referred to in Annex 1 shall be reviewed periodically, at least once in every five (5) years.

## CHAPTER IV.

#### Initial Environmental Examination

- 21. The IEE process is outlined in the diagram set forth in Annex 2 'Environmental Assessment Procedure Flowchart'.
- 22. Prior to commencement of the IEE investigations, the Project Proponent shall inform to the Ministry in writing as to the identity of the organization(s) and/or person(s) it has selected to undertake the IEE investigation and reporting.
- 23. Upon receipt of the information about the identity of the proposed organization(s) and/or person(s) selected by the Project Proponent to undertake the IEE, the Ministry will within seven (7) days check to confirm that such organization(s) and/or person(s) has been duly registered, and is then in good standing, with the Ministry. The Project Proponent shall be responsible to verify with, or to obtain the confirmation of, the Ministry through its website or by other means, as to the registration and standing of such organization(s) and/or person(s).
- 24. The Project Proponent shall undertake the following public consultation process in regard to an IEE Type Project:
  - a) disclose information about the proposed Project to the public and civil society through local media, including by means of the prominent posting of legible sign boards at the Project site which are visible to the public; and
  - b) arrange the required complement of consultation meetings as advised by the Ministry, with local communities, potentially PAPs, local authorities, community based organizations, and civil society.

#### **IEE Report Requirements**

- 25. The Project Proponent shall issue a letter of endorsement in a format prescribed by the Ministry. Such letter shall be submitted to the Ministry together with the IEE Report confirming:
  - a) the accuracy and completeness of the IEE,

- b) that the IEE has been prepared in strict compliance with applicable laws including this Procedure, and
- c) that the Project will at all times comply fully with the commitments, mitigation measures, and plans in the IEE Report.
- 26. An IEE Report shall contain the following:
  - a) Project description in reasonable detail together with overview and layout maps in proper scale indicating all relevant features, images, aerial photos and satellite photos;
  - b) identification of the Project Proponent including (where the Project Proponent is not a natural person but a company or other juridical entity) the identification of the owners, directors (if any) and day to day management and officers of the Project Proponent;
  - c) identification of the IEE experts, including which expert is responsible for which part of the IEE Report;
  - d) description of the surrounding environmental conditions of the Project including maps of all relevant physical, biological, social, socio-economic and cultural features;
  - e) identification and assessment of potential Adverse Impacts including presentation of Adverse Impacts on maps, images, aerial photos and satellite images;
  - f) results of the public consultation / public participation process and the Project Proponent's written response to comments received during that process;
  - g) the environmental protection measures of the Project;
  - h) the conclusion of the IEE;
  - i) the EMP; and
  - j) the Persons, Organizations and Budgets needed for implementation of the EMP.

#### **Submission of IEE Report**

- 27. After completing all investigations and public consultation and participation processes required for IEE type Projects, the Project Proponent shall submit the IEE Report for the Project to the Ministry in both digital form and complete paper copies, together with the required service fee.
- 28. Not later than ten (10) days after submission of the IEE Report to the Ministry, the Project Proponent shall disclose the IEE Report to civil society, PAPs, local communities and other concerned stakeholders by means of local media (i.e., newspapers, etc.), at public meeting places (e.g., libraries, community halls) and at the offices of the Project Proponent.

#### **Review and Approval Process for IEEs**

- 29. Upon receipt of the IEE Report from the Project Proponent, the Ministry shall:
  - a) disclose the IEE Report to the public by proper media;

- b) invite comments and suggestions on the IEE Report from all relevant parties including relevant government organizations, institutions, civil society organizations, and PAPs, as appropriate;
- c) arrange public consultation meetings at the local level, at which the Project Proponent shall present the IEE Report; and
- d) collect and review all comments and recommendations received and make a final decision on approval of the IEE Report.
- 30. If it is determined by the Ministry that the IEE Report does not satisfy requirements, then the Project Proponent shall be called upon to undertake necessary amendments and/or to provide supplementary information as directed by the Ministry.
- 31. Upon completion of its review of the IEE Report, the Ministry shall;
  - a) approve the IEE Report, subject to any conditions as may be prescribed, and issue an ECC; or
  - b) require that the Project undergo EIA and cite the reasons for this decision and inform the Project Proponent of its decision; and in either case
  - c) publicly disclose its decision.
- 32. The Ministry shall deliver its final decision within sixty (60) days of receipt of an IEE Report. If the Ministry requires an IEE Report to be amended, then the due date for delivery of the Ministry's decision shall be extended accordingly.
- 33. All costs incurred in completing the IEE Report disclosure and review, including the public consultation process, shall be borne by the Project Proponent.

## CHAPTER V.

# **Environmental Impact Assessment**

#### **EIA Process**

- 34. The EIA process is described in the diagram in Annex 2.
- 35. Prior to commencement of the EIA, the Project Proponent shall inform to the Ministry in writing as to the identity of the organization(s) and/or person(s) it has selected to undertake the EIA investigation and reporting.
- 36. Upon receipt of the information about the identity of the proposed organization(s) and/or person(s) selected by the Project Proponent to undertake the EIA, the Ministry will check to confirm that such organization(s) and/or person(s) has been duly registered, and is then in good standing, with the Ministry.

## Scoping

- 37. All EIA Type Projects shall undergo Scoping.
- 38. The Project Proponent shall be responsible to ensure that the Scoping and the preparation of the TOR for the EIA Report are undertaken in a professional manner and in accordance with this Procedure and any applicable guidelines issued or adopted by the Ministry.
- 39. The Scoping shall, in respect of the proposed Project:

- a) define the study area, area of influence, time boundaries, project phases, and potential stakeholders;
- b) start the process of understanding the applicable regulations and standards, and their context for Project design and completion of the EIA;
- make a provisional identification of Environmental, Social and, if any, Health Impacts, focusing in particular on the environmental, social and health issues that need to be addressed in subsequent EIA studies;
- d) provide an indication of what baseline data and information are required, and how it is proposed to obtain it (although there is no need to actually collect any data at this stage);
- e) provide an opportunity for consultants, relevant authorities, project developers, interested and affected parties to express their views and concerns regarding the proposal before an EIA proceeds;
- f) enable an efficient and comprehensive assessment process that saves time, resources, costs and delays; and
- g) identify potentially affected communities and other stakeholders with an interest in the Project.
- 40. As part of the Scoping, the Project Proponent shall ensure that the following public consultation and participation process is carried out:
  - a) disclose information about the proposed Project to the public and civil society through local media, including by means of the prominent posting of legible sign boards and advertising boards at the Project site which are visible to the public; and
  - b) arrange the required complement of consultation meetings as advised by the Ministry, with local communities, potentially PAPs, local authorities, community based organizations, and civil society.
- 41. The Project Proponent shall prepare a Scoping Report with the following content:
  - a) Executive Summary
  - b) Context of the Project
  - c) Overview of the Policy, Legal and Institutional Framework
  - d) Project Description and Alternatives
  - e) Description of the Environment together with maps in proper scale indicating all relevant features, images, aerial photos and satellite images
  - f) Key Potential Environmental Impacts and Mitigation Measures
  - g) Public Consultation and Disclosure
  - h) Conclusions and Recommendations.
- 42. Based on the Scoping, the Project Proponent shall prepare the TOR for the EIA investigations in accordance with applicable guidelines issued or adopted by the Ministry.
- 43. The Project Proponent shall submit the completed Scoping Report and TOR to the Ministry for review and approval.

- 44. The Ministry will within fifteen (15) days of receipt of the Scoping Report and TOR either:
  - a) approve the Scoping Report and TOR with or without conditions, or
  - b) require the Project Proponent to revise the Scoping Report and TOR in accordance with comments of the Ministry.

## **EIA Investigation**

- 45. The Project Proponent shall ensure that the EIA investigation properly addresses all Adverse Impacts and is undertaken in accordance with the approved TOR.
- 46. An EIA investigation shall consider all biological, physical, social, economic, health, cultural and visual components of the environment, together with all pertinent legal matters relating to the environment (including land use, resources use, and ownership of and rights to land and other resources) that may be affected by the Project during all project phases including pre-construction, construction, operation, decommissioning, closure, and post-closure; and shall identify and assess all Adverse Impacts and risks for environment, social and, if relevant, health that potentially could arise from the Project.
- 47. The investigations shall include all necessary data collection, technical studies, modeling, field surveys, field sampling, laboratory analysis, engineering designs and calculations, and consultations to determine and document that all feasible measures are taken to ensure that all Residual Impacts are within standards and are acceptable to the Ministry and interested and affected persons.
- 48. The investigation shall also include an analysis of Alternatives. Such analysis shall include a description of each Alternative, and an assessment and comparison of the Adverse Impacts, required mitigation measures and Residual Impacts of the Alternatives.
- 49. The Project Proponent is obliged to use, comply with and refer to applicable national standards, international standards adopted by the Government and/or the Ministry, or, in the absence of relevant national or adopted international standards, such standards as may be agreed with the Ministry.
- 50. The EIA shall consider the views, concerns, and perceptions of stakeholders, communities and individuals that could be affected by the Project or who otherwise have an interest in the Project. The EIA should include the results of public consultations and negotiations with the affected populations on the environmental and social issues. Public concerns should also be taken into account in assessing impacts, designing mitigation measures, and selecting monitoring parameters.
- 51. As part of the EIA investigations, the Project Proponent shall undertake the following consultation process:
  - a) timely disclosure of all relevant information about the proposed Project and its likely Adverse Impacts to the public and civil society through local and national media, the website of the Project Proponent, at public places such as libraries and community halls and sign boards at the Project site visible to the public
  - b) arrange consultation meetings at national, state and local level with PAPs, authorities, community based organizations, and civil society;

- c) consultations with concerned government organizations including the Ministry, the concerned sector ministry, regional government authorities, and others; and
- d) field visits for the Ministry and concerned government organizations.

### **EIA Report Requirements**

- 52. The Project Proponent shall issue a letter of endorsement in a format prescribed by the Ministry. Such letter shall be submitted to the Ministry together with the EIA Report confirming:
  - a) the accuracy and completeness of the EIA;
  - b) that the EIA has been prepared in strict compliance with applicable laws including this Procedure and with the TOR for the EIA; and
  - c) that the Project will at all times comply fully with the commitments, mitigation measures, and plans in the EIA Report.
- 53. The Project Proponent is responsible for the preparation of an EIA Report which shall contain the following:

#### 1.0 Executive Summary

#### 2.0 Introduction

- 2.1 Presentation of the Project Proponent / Project developer
- 2.2 Presentation of the Environmental and Social Experts
- 2.3 Presentation of the Health Experts

## 3.0 Policy, Legal and Institutional Framework

- 3.1 Corporate Environmental and Social Policies (if applicable)
- 3.2 Policy and Legal Framework, including existing laws and rules, other related environmental law and rules, International Conventions, Treaties and Agreements, and international standards, guidelines
- 3.3 Institutional Framework
- 3.4 Project's Environmental and Social Standards
- 3.5 Health Standards for Projects with Health Impacts

#### 4.0 Project Description and Alternative Selection

- 4.1 Project Background
- 4.2 Project Location, overview map and site layout maps
- 4.3 Comparison and Selection of Alternatives
- 4.4 Description of the Selected Alternative(s) by project phase (preconstruction, construction, operation, decommissioning, closure and post closure)

#### 5.0 Description of the Surrounding Environment

- 5.1 Setting the Study Limits
- 5.2 Methodology and Objectives

- 5.3 Physical Components including topographic maps, water resources map, geology maps, soil maps hydrology / hydrogeology data and maps, environmental quality data and climate data
- 5.4 Biological Components including biodiversity maps, vegetation cover maps
- 5.5 Socio-Economic Components including land use maps, population distribution, maps of other socio-economic indicators
- 5.6 Cultural Components including maps with location of cultural, historical, and religious importance
- 5.7 Visual Components including landscape and three dimensional models

#### 6.0 Impact and Risk Assessment and Mitigation Measures

- 6.1 Impact Assessment Methodology
- 6.2 For each Project phase (pre-construction, construction, operation, decommissioning, closure, and post closure) identify potential physical, biological, social, socio-economic, health, cultural, and visual impacts; this shall include identification of potential impacts on climate change such as greenhouse gas emissions and loss of carbon sinks or stocks, and identification of impacts of climate change on the Project based on available climate change predictions from designated national authorities or international scientific research bodies; and develop mitigation measures, assess Residual Impacts and prepare a comprehensive monitoring plan
- 6.3 Relevant maps in proper scale clearly indicating the location of sources of Adverse Impacts, images, aerial photos, satellite images, the areas, people, assets or features impacted, sensitive habitats, vulnerable areas or settlements and the nature of the impacts

#### 7.0 Cumulative Impact Assessment

- 7.1 Methodology and Approach
- 7.2 Cumulative Impact Assessment

#### 8.0 Environmental Management Plan

- 8.1 Project Description
- 8.2 Project's Environmental, Social and, where relevant, Health Policies and Commitments, legal requirements and institutional arrangements
- 8.3 Summary of Impacts and Mitigation Measures
- 8.4 Management and Monitoring Plans by Project phase Pre-Construction, Construction, Operation and Decommissioning, closure and post-closure
  - 8.4.1 Content of each Sub-Plan Objectives
    - 8.4.1.1 Legal Requirements
    - 8.4.1.2 Overview maps and site layout maps, images, aerial photos, satellite images
    - 8.4.1.3 Management Actions

- 8.4.1.4 Monitoring Plans
- 8.4.1.5 Implementation Schedule
- 8.4.1.6 Responsibilities
- 8.4.2 Management and Monitoring Plans (Examples)
  - 8.4.2.1 Thematic Sub-Plans: Noise, waste, air quality, odor, chemicals, water quality, erosion and sedimentation, biodiversity, occupational and community health and safety, cultural heritage, employment and training
  - 8.4.2.2 Site Specific Sub-Plans
- 8.4.3 Emergency Plan
- 8.4.4 Public Consultation and Disclosure

#### 9.0 Public Consultation and Disclosure

- 9.1 Methodology and approach
- 9.2 Summary of consultations and activities undertaken
- 9.3 Results of Consultations
- 9.4 Further ongoing Consultations
- 9.5 Disclosure

## **Submission of EIA Report**

- 54. After completing all investigations and public consultation and participation processes required for EIA Type Projects, the Project Proponent shall submit the EIA Report to the Ministry in both digital form and complete paper copies, together with the required service fee.
- 55. Not later than ten (10) days after submission of the EIA Report to the Ministry, the Project Proponent shall disclose the EIA Report to civil society, PAPs, concerned government organizations, local communities and other concerned stakeholders by means of national media, the website of the Project Proponent, at public meeting places (e.g., libraries, community halls) and at the offices of the Project Proponent.
- 56. Upon receipt of the EIA Report, the Ministry will make the EIA Report publically available.

## **Review and Approval Process for EIA**

- 57. Upon receipt of the EIA Report from the Project Proponent, the Ministry shall:
  - a) submit the EIA Report to the EIA Report Review Body for comment and recommendations;
  - b) disclose the EIA Report to the public by proper media;
  - c) invite comments and suggestions on the EIA Report from all relevant parties including involved government organizations, institutions, civil society organizations, and PAPs, as appropriate;
  - d) arrange public consultation meetings at national and State / Regional / local levels where the Project Proponent shall present the EIA Report; and

- e) collect and review all comments and recommendations received, including those of the EIA Report Review Body, and make final decision on approval of the EIA Report.
- 58. If it is determined by the Ministry that the EIA Report does not satisfy requirements, then the Project Proponent shall be called upon to undertake the necessary amendments as directed by the Ministry. The Ministry shall deliver its final decision within ninety (90) days of receipt of the EIA Report. In case of complex projects, or if the Ministry requires the EIA Report to be amended, then the timeline will be extended accordingly.
- 59. All costs incurred in completing the EIA Report disclosure and review, including the public consultation process, shall be borne by the Project Proponent.
- 60. Upon completion of its review of the EIA Report, the Ministry shall;
  - a) approve the EIA Report, subject to any conditions as may be prescribed, and issue an ECC; or inform the Project Proponent of its decision to reject the EIA Report and cite reasons for doing so (grounds for rejection of an EIA Report shall be in accordance with guidelines to be issued by the Ministry); and in either case
  - b) publicly disclose its decision.

## **Appeal Process**

- 61. Any Project Proponent, Person or organization which has submitted an EIA in accordance with this Procedure, or government organization, or other Person or organization potentially affected by any Adverse Impacts of the Project, shall have the right to file an appeal to the Environmental Conservation Committee with respect to a decision by the Minister to reject or approve an EIA Report, provided, however, that no appeal of a decision by the Minister to reject an EIA Report shall be allowed, except where the appellant has specifically alleged that such rejection was not duly made in accordance with this Procedure or that such rejection was based upon an unsubstantiated or unjustified decision by the Minister. No condition prescribed by the Ministry shall be subject to appeal by a Project Proponent. No multiple appeals by any Project Proponent, Person or organization which has submitted an EIA in accordance with this Procedure, or government organization, or other Person or organization potentially affected by any Adverse Impacts of the Project shall be allowed with respect to a decision by the Minister to reject or approve an EIA Report
- 62. Any appeal allowed to be filed under this Procedure must be submitted to the Ministry within thirty (30) days of the date on which the Ministry's decision to approve or reject the EIA Report was publicly disclosed.
- 63. With respect to any appeals allowed to be filed under this Procedure that are received by the Ministry within the appeal submission period, the Ministry shall, within fifteen (15) days of such receipt, forward that appeal to the Environmental Conservation Committee for consideration.
- 64. The Environmental Conservation Committee, shall within thirty (30) days of its receipt of a forwarded appeal from the Ministry, consider that appeal and make a decision to:
  - a) uphold the decision of the Ministry, or

- b) instruct the Ministry to require the Project Proponent to revise and resubmit the EIA Report to the Ministry, or
- c) instruct the Ministry to alter, revise or cancel its decision on the EIA Report and cite its grounds for such instruction.
- 65. The Environmental Conservation Committee shall inform the Ministry, the appellant and the Project Proponent about its decision.
- 66. The Ministry shall, upon receipt of the decision from the Environmental Conservation Committee, publicly disclose any reversal or modification of its decision concerning an EIA Report.

## CHAPTER VI.

## **Environmental Consideration in Project Approval**

#### **Project Approval Requirements**

- 67. For Projects that require an IEE or EIA, before any permit is granted or issued by any ministry, or any other competent authority in respect of any application to proceed with implementation of such Projects, an ECC shall first have been duly issued by the Ministry in accordance with this Procedure. Relevant departments and organizations of the government may submit a Project Proposal to the Ministry to obtain a preliminary confirmation from the Ministry as to whether an EIA will be required or not for that Project.
- 68. When the Myanmar Investment Commission or the relevant authority has given approval to a Project for which an ECC has been issued, it shall communicate such approval to the Ministry. Upon receipt of the written approval by the Myanmar Investment Commission or the relevant authority, the Project Proponent shall commence implementation of the Project strictly in accordance with the conditions attached to the ECC and including the EMP, within such time as may be prescribed by the Ministry.

# **Environmental Compliance Certificate, Conditions and Revisions to Conditions**

- 69. The ECC issued by the Ministry shall be valid from the date of such issuance for an initial period of two (2) years (during construction and otherwise before the commencement of commercial operation) or five (5) years (commencing from commercial operations), as the case may be. Following its issuance, the ECC can be renewed in increments of two (2) years (until such time as commercial operation has commenced) or five (5) years (if commercial operations have already commenced), in either case in accordance with revised conditions as the Ministry may determine in accordance with Article 75. The preparation and approval of an updated Construction Phase EMP or an updated Operational Phase EMP, as the case may be, in accordance with Articles 78, 79 and 80, shall be a condition to the renewal or extension of an ECC.
- 70. The Project Proponent shall commence substantial implementation of the Project within such initial two (2) year period, and shall not later than thirty (30) days after

- such commencement notify the Ministry in writing of the date of commencement, and identify the activities constituting substantial implementation of the Project.
- 71. The Project Proponent shall be required to carry out and submit for the Ministry's approval a new assessment (IEE or EIA, as the case may be) if substantial Project commencement has not occurred within two (2) years after obtaining the ECC, unless the Project Proponent has applied in writing providing reasons why it has not been able to commence substantial implementation of the Project, indicating what further period of time is needed before substantial commencement of the Project can take place, and the Ministry has in its discretion granted an extension.
- 72. An ECC is granted in respect of a specific, clearly identified Project and constitutes a site-specific environmental approval, which is not valid in respect of any different site. The ECC must clearly specify:
  - a) The registered name and registered office address of the Project Proponent / Project Owner to whom the ECC is issued;
  - b) The documentation (EIA/IEE Report) that the Project Proponent submitted to the Ministry and on the basis of which the ECC has been issued;
  - c) A map, images, aerial photos and satellite images showing the geographic location(s) of the Project and each of its components;
  - d) The Project type and layout with an overview of activities, installations, operations, production capacity, production methods, and waste generation; and
  - e) Project phases and the timing (commencement and conclusion dates of each).
- 73. The Ministry may prescribe conditions of an ECC. Such conditions may encompass any or all of:
  - a) General management: (i) procedures and management systems to identify, control, prevent or minimize all Adverse Impacts, (ii) procedures to ensure compliance with all environmental commitments, (iii) procedures to implement the measures described in the EMP, Construction Phase EMP, and/or Operational Phase EMP, as the case may be, (iv) procedures to improve the environmental performance of the Project, (v) organization with qualified environmental personnel, v) documentation and reporting procedures;
  - b) Emissions: (i) Emissions not allowed, (ii) Emission Limit Values in terms of types, substances, loads, concentrations, rates, timing, duration, frequency, seasons, Project phase, (iii) Emission points, (iv) form and media, (v) recipients, (vi) contribution to Environmental Quality Standards, (vii) statistical methods for determining compliance;
  - c) Use of energy and natural resources: amounts, type, origin of resource, rates, effectiveness of use, waste generation;
  - d) Pollution Prevention: Effectiveness of production or construction methods or waste storage and treatment facilities to (i) prevent or, where this is not practicable, to minimize pollution, and to (ii) prevent or minimize the risk of pollution;

- e) Nature conservation and management: (i) sites, environments or species, (ii) effectiveness of environmental measures to prevent or minimize Adverse Impacts on certain environments or species;
- f) Hazardous or toxic materials including waste: (i) limits to the types, categories, and amounts, (ii) methods and systems of collection, storage, handling, transport, treatment and disposal;
- g) Waste management: (i) limits to the types, categories, and amounts of waste (liquid, solid, atmospheric) generated, (ii) methods and systems of collection, storage, handling, transport, treatment and disposal, iii) recycling or reuse of wastes:
- h) Transport and access: (i) access points, (ii) means of transport of materials and people to and from the Project, (iii) transport routes for products, materials or waste, (iv) access control measures;
- Decommissioning, rehabilitation, clean-up and closure: (i) sites, areas / environments and facilities, (ii) objectives and standards, (iii) site conditions and after use, (iv) timing, (v) controls and monitoring;
- j) Control measures: (i) prevention of accidents, (ii) measures and procedures in case of accidents, incidents, and operational irregularities, (iii) control and maintenance of pollution prevention / minimization measures, (iv) safety zones;
- k) Monitoring: i) parameters, ii) methods, iii) sampling and analyses, iv) point of monitoring, v) frequency, vi) timing, vii) data management, viii) maintenance and control of monitoring equipment, ix) documentation and reporting;
- Documentation and reporting: (i) parameters and issues that must be documented and reported, (ii) types and methods, (iii) frequency and timing, (iv) quality controls, (v) recipients;
- m) Financial guarantee: (i) type of guarantee, (ii) amount, (iii) timing, (iv) application, (v) type and financial capacity of guarantor;
- n) Funding of inspection by the Ministry: (i) amounts, (ii) payment procedure, (iii) timing and frequency.
- 74. The Ministry may, on the joint application of a Project Owner and a proposed transferee, transfer to the proposed transferee an ECC or any part of an ECC.
- 75. The Ministry may unilaterally modify conditions in the ECC and/or require the Project Proponent to revise and resubmit the EMP to the Ministry for review and approval, if at any time the Ministry determines that:
  - a) the mitigation measures are insufficient or inadequate to mitigate the actual or likely impacts of the Project; or
  - b) new information becomes known as to how harmful the Adverse Impacts of the Project are, or are likely to be or become; or
  - c) the Project has Adverse Impacts which could not be foreseen at the time the originally approved EIA Report and EMP were approved; or
  - d) the Adverse Impacts of the Project are greater than those anticipated impacts that formed the basis for the preparation, submission, and approvals of the

- original EIA Report and EMP and the issuance of the ECC and Conditions therein; or
- e) new techniques conforming to the definition of Best Available Techniques are available which would significantly reduce the Adverse Impacts of the Project; or
- the Adverse Impacts of the Project can be reduced through adherence to Good Practice without commercially significant extra cost to the Project; or
- g) the measures / conditions are unnecessary to mitigate the Adverse Impacts.
- 76. In case of major changes in size, scope, location, layout, technology, risk associated with foreseeable Adverse Impacts, production methods or pollution prevention / mitigation measures of the Project, or an extension or second phase development is proposed, the Project Proponent shall notify the Ministry and provide supporting documentation of such changes within the timeframe as may be prescribed.
- 77. The Ministry shall, upon consideration of the supplemental documentation, if any, make a decision on modifications to the conditions in the ECC or require that a new EIA or IEE, as the case may be, shall be prepared and submitted.
- 78. For EIA Type Projects with comprehensive construction works, the Ministry may include as a condition in the ECC that the Project Proponent shall prepare and submit to the Ministry a detailed Construction Phase EMP for review and approval prior to the intended start of construction works of the Project.
- 79. For EIA Type Projects, the Ministry may include as a condition in the ECC that the Project Proponent shall prepare and submit to the Ministry a detailed Operational Phase EMP for review and approval prior to the intended start of operations of the Project.
- 80. The Ministry may require that a Construction Phase EMP or Operational Phase EMP, as the case may be, shall be periodically updated and resubmitted to the Ministry for its review and approval.
- 81. The Project Proponent / Project Owner shall incorporate all relevant environmental commitments and requirements set forth in the EIA Report, Construction Phase EMP and/or Operational Phase EMP as the case may be, and in the ECC, applicable Emission Limit Values and Environmental Quality Standards, into detailed designs, construction contract specifications, and contracts on Project operations related to any part of the Project.
- 82. In case the Ministry finds that changes to the Project, the Project site or Adverse Impacts of the Project warrant revisions to the EMP, Construction Phase EMP, or Operational Phase EMP as the case may be, then the Ministry may require the Project Proponent to prepare and submit a revised EMP, Construction Phase EMP, or Operational Phase EMP, as the case may be to the Ministry for review and approval.

## Responsibility for all Adverse Impacts

83. The Project Owner shall bear full legal and financial responsibility for all Adverse Impacts and all actions and omissions of itself and its contractors, subcontractors, officers, employees, agents, representatives, and consultants employed, hired, or

- authorized by the Project acting for or on behalf of the Project, in carrying out work on the Project.
- 84. The Project Owner shall fully implement the EMP, all Project commitments, and Conditions, and is liable for ensuring that all contractors and subcontractors of the Project comply fully with all Applicable Laws, the EMP, Project commitments and Conditions when providing services to the Project.
- 85. The Project Proponent / Project Owner shall be responsible for, and shall fully and effectively implement, all requirements set forth in the ECC, applicable laws, and standards.

## CHAPTER VII.

# Monitoring

- 86. The Project Owner shall, during all phases of the Project (pre-construction, construction, operation, decommissioning, closure and post closure), engage in continuous, pro-active and comprehensive self-monitoring of the Project and activities related thereto, all Adverse Impacts, and compliance with applicable laws and standards, the ECC, and the EMP.
- 87. The Project Owner shall notify and identify in writing to the Ministry any breaches of its obligations or other performance failures or violations of the ECC and the EMP as soon as reasonably possible and in any event, in respect of any breach which would have a serious impact or where the urgent attention of the Ministry is or may be required, within not later than twenty-four (24) hours, and in all other cases within seven (7) working days of the Project Proponent becoming aware of such incident.
- 88. The Project Owner shall submit monitoring reports to the Ministry not less frequently than every six (6) months or periodically as provided in a schedule in the EMP.
- 89. The monitoring reports shall include:
  - a) documentation of compliance with all Conditions;
  - b) progress made to date on implementation of the EMP against the submitted implementation schedule;
  - c) difficulties encountered in implementing the EMP and recommendations for remedying those difficulties and steps proposed to prevent or avoid similar future difficulties:
  - d) number and type of non-compliance with the EMP and proposed remedial measures and timelines for completion of remediation;
  - e) accidents or incidents relating to the occupational and community health and safety, and the environment; and
  - f) monitoring data of environmental parameters and conditions as committed in the EMP or otherwise required.
- 90. The Project Owner shall within ten (10) days of completing a monitoring report contemplated in Articles 88 and 89 in accordance with EMP schedule make the report publicly available on the Project's website, at a designated public office as agreed with the Ministry and at the Project offices. Any organization or person may

request a digital copy of a monitoring report and the Project shall, within ten (10) days of receiving such request, submit a digital copy via email or as may otherwise be agreed upon with the requestor.

## **Monitoring and Inspection of the Ministry**

- 91. The Ministry has the right, using its own officers at national, regional, state and/or local offices, the services of any consultant, or both, to conduct monitoring and inspections of a Project and activities related thereto in order to control and determine compliance by the Project with all applicable environmental and socioeconomical requirements and, where possible, to prevent violations of the Project's obligations.
- 92. If, upon inspection, the Ministry identifies any non-compliance with the EMP or Conditions in the ECC, the Ministry may require the Project Proponent to undertake remedial measures and/or may impose penalties as provided for in this Procedure.
- 93. For purposes of monitoring and inspection, the Project Owner shall grant to the Ministry and/or its representatives, at any time during normal working hours and from time to time as and when the Ministry may reasonably require, access to the Project's offices and to the Project site and any other location at which the Project activities or activities related to the Project are performed.
- 94. In carrying out any inspection, the Ministry may take photographs and make other audio and video recordings of any type, take soil, sediment, water, and air samples, and examine computers, copy documents including digital files, interview persons, and carry out any other investigation which the Ministry believes to be necessary or appropriate.
- 95. In the event of an emergency, or where, in the opinion of the Ministry, there is or may exist a violation or risk of violation of the compliance by the Project with all applicable environmental and social requirements, the Project shall grant full and immediate access to the Ministry at any time as may be required by the Ministry, including outside normal working hours.
- 96. The Ministry's inspections may include without limitation sites, facilities, vehicles, computers, archives, documents and all other forms and types of media and information storage, and persons.
- 97. The Project shall further ensure that the Ministry's rights of access hereunder shall extend to access by the Ministry to the Project's contractors and subcontractors.
- 98. Where, in the opinion of the Ministry, the Project is not in compliance with its obligations, the Ministry shall promptly inform the Project.
- 99. The Ministry may recommend and warn the Project to strictly implement its obligations. The Ministry reserves the right to post any warning on the Ministry website or to require the Project to post and retain such warning on the Project's website, or both, or to effect disclosure to the public in other appropriate ways.
- 100. The Ministry shall indicate the manner in which environmental obligations are not being complied with, and shall give the Project a specified time period (determined by the Ministry to be reasonable under the circumstances) within which to bring the Project into compliance.

- 101. Where, in the opinion of the Ministry, the Project Proponent / Project Owner is not in compliance with, or is likely not to comply with, its environmental obligations, the Ministry may take such enforcement actions as the Ministry thinks appropriate as are set out in any applicable law, including without limitation the right to suspend the Project operation, and the right of the Ministry to employ any third party to correct such non-compliance at the Project Proponent's / Project Owner's sole expense.
- 102. All costs of the Ministry to conduct inspection and monitoring of the Project shall be borne by the Project. Such costs shall not exceed that which is necessary to ensure the Project's compliance with the Project commitments as set out in the EMP and in the ECC.

# **CHAPTER VIII.**

#### **Penalties**

- 103. The Ministry shall have the right to impose penalties on a Project for any breach by the Project, the Project Proponent / Project Owner, or any contractor of the Project or any other Person acting on behalf of the Project, of commitments as set forth in the EMP or the ECC.
- 104. Penalties and the risk of their incurrence are intended to provide meaningful incentive for the Project promptly and fully to remedy any breaches or performance defects with respect to the Project's commitments, and to encourage the Project pro-actively to address and effectively to resolve the underlying causes of such breaches or performance defects to avoid future recurrences.
- 105. The imposition of such penalties on Company shall be subject to:
  - a) with respect to the first occurrence of any such breach, violation or performance failure, receipt by Company of prior written notice and expiration of a reasonable cure period not exceeding sixty (60) days.
  - b) the Project shall not be entitled to receive any warning or receive the benefit of any cure period with respect to the recurrence of any such breach, violation or performance failure that occurs within five (5) years from the date of the initial breach, violation or performance failure prior to the imposition of applicable penalties by the Ministry.
- 106. Penalties are imposed and required to be paid in addition to any costs of remediation, clean-up, and compensation. Penalties imposed pursuant to this Procedure are in addition to any penalties that may be imposed under any other applicable law or regulation.
- 107. The payment of penalties by the Project shall not relieve the Project of liability, if any, for claims that may be asserted against the Project by third parties with respect to damage incurred and/or injury suffered arising out of the Project's performance or any breaches or performance defects by the Project.
- 108. Penalties payable to the Ministry under this Procedure are as set forth in Annex 3 'Prescribed Penalties Under Procedure' hereto.
- 109. The Project Proponent shall disclosure to the Ministry all information regarding the likely Adverse Impacts of the proposed Project. Failure to disclose information that is or should have been known to the Project Proponent shall be an offence under the

Law and may also be grounds for rejection of the proposed Project, to suspend the Project, to withdraw the approval, or to impose additional conditions.



## **Annex 1** Categorization of Economic Activities for Assessment Purposes

- a. This Annex provides guidance as to whether an IEE or EIA is required for any proposed project or activity. If, as a result of that determination, an IEE or an EIA is determined to be required, then the proponent of the project or activity will be obliged to prepare, obtain approval for, and implement an appropriate EMP in respect of the proposed project or activity. Any appeal from such determination must be made in accordance with the EIA Procedure.
- b. Projects and activities requiring an IEE are generally those which: (i) are limited in scope or size; (ii) have well known environmental and social impacts; or (iii) have impacts which can be mitigated and managed by well-proven and available technologies and practices but with respect to which specific controls, measures and alternatives must be assessed, designed and implemented. Projects and activities requiring an EIA are generally those which: (i) involve multiple components and many or varied pollution sources and/or pollutant types, requiring integrated environmental management plans to be tailored specifically to mitigate such pollution; (ii) are characterized by a high risk of significant, adverse environmental or social impact; (iii) are of a type or size for which there is a lack of prior knowledge and experience as to what the potential adverse impacts may be and their size or significance; (iv) where the significance of the potential environmental or social impacts or the sensitivity/vulnerability of the recipients of those impacts requires a high level of environmental and social management expertise and skills, and continued strict control and supervision throughout the life of the project or activity.
- c. Any proposed project or activity which has been determined not to require an EIA or IEE (whether because it is below the indicated IEE threshold or is not listed in the categorization below) shall nonetheless be subject to the imposition of any conditions deemed appropriate by the Ministry as part of the review, approval and permitting procedure of the Government.
- d. Notwithstanding any categorization set forth in this Annex, the Ministry reserves the right, if the Ministry determines that special circumstances so warrant: (i) to require a project or activity that would otherwise be required to complete and submit an IEE to complete and submit an EIA instead, (ii) to allow a project or activity that would otherwise be required to complete and submit an IEE instead, and (iii) to exempt from completing any IEE or EIA assessment a project or activity that would otherwise be required to complete and submit such an assessment.
- e. For any preliminary activities to be carried out by or on behalf of a proponent of a project or activity before the Ministry has determined whether the project or activity is obliged to carry out an IEE or EIA, the Ministry shall have the right to establish and impose requirements with respect to those preliminary activities, which the project or activity proponent shall be obliged to comply with as a condition to engaging in those preliminary activities.
- f. For purposes of this Annex, the Ministry may in its discretion elect to treat projects or activities that are logically or economically linked, or which have the same or related proponents, or which are sequential in time, as a single project or activity. Components of basic infrastructure (such as an access road, transmission tower or waste disposal facility) that are required for a larger project (such as a mine or a power plant) shall be considered to be part of that larger project. In such circumstances, the Ministry may determine whether an IEE or an EIA will be required for the projects or activities that are treated as a single project or activity.

- g. All projects and activities, whether categorized in this Annex as requiring an IEE, an EIA, nor neither: (i) are obliged to obtain all required authorizations, permits, licenses and approvals and to comply with all applicable laws, regulations, procedures, ministerial directives, zoning, planning requirements and other governmental requirements, and (ii) shall remain subject to any environmental and / or social conditions which the Ministry may impose as a condition to the commencement or continuation of construction or operation of that project or activity.
- h. An EIA is required in all cases where the project or activity will be located in or will have foreseeable adverse effects on any legally protected national, regional or state area, including without limitation: (i) a forest conservation area (including biodiversity reserved area); (ii) a public forest; (iii) a park (including marine parks); (iv) a mangrove swamp; (v) any other sensitive coastal area; (vi) a wildlife sanctuary; (vii) a scientific reserve; (viii) a nature reserve; (ix) a geophysically significant reserve; (x) any other nature reserve nominated by the Minister; (xi) a protected cultural heritage area; and (xii) a protected archeological area or area of historical significance.
- i. When used in this Annex, terms such as "forest", "industrial", "large scale", "park" and "reserve" shall be interpreted in accordance with relevant legislation, except where the Ministry has provided a definition or clarification, in which case that definition or clarification shall be the basis for interpretation.
- j. If an existing project has not required, or a proposed future project will not under this Annex require, an IEE or EIA (as the case may be), but a proposed expansion of that project, when considered together with the original project as a single combined project, would cause that project to require an IEE or EIA (as the case may be), then the Ministry shall determine whether an IEE or EIA (as the case may be) of the original project plus the proposed expansion shall be required and / or whether an updated, revised EMP shall be required.
- k. If an owner of an existing project or activity intends to expand that project or activity, then the Ministry shall consider and use the type and size thresholds specified in the categorization below as the basis for determining whether such expanded project or activity will be required to conduct any additional assessment, either in the form of an IEE or an EIA.
- I. If a production capacity included in the categorization below has not been explicitly expressed as a total production capacity (e.g. installed capacity for energy production), then the applicable production capacity threshold shall be the total production output under normal operations.
- m. The Ministry reserves the right to interpret, clarify and amend this Annex from time to time as and when it deems necessary.

No.	Type of Economic Activity	Criteria for IEE Type Economic Activities <sup>1</sup>	Criteria for EIA Type Economic Activities <sup>2</sup>
		SPECIAL INVESTMENT PROJECTS	
1.	Projects in which investment is decided by the Parliament or the President		All sizes
		ENERGY SECTOR DEVELOPMENT	
2.	Hydro Power Plants	Installed capacity ≥ 1 MW but < 15 MW and Reservoir volume (full supply level) < 20,000,000 m³ and Reservoir area (full supply level) < 400 ha	Installed capacity ≥ 15 MW  or  Reservoir volume (full supply level) ≥  20,000,000 m³  or  Reservoir area (full supply level) ≥ 400 ha
3.	Nuclear Power Plants		All sizes
4.	Natural Gas or Bio Gas Power Plants	≥ 5 MW but < 50 MW	≥ 50 MW
5.	Coal-fired Power Plants	< 10 MW	≥ 10 MW
6.	Thermal Power Plants other than the types in items 4 and 5	≥ 5 MW but < 50 MW	≥ 50 MW
7.	Wind Power Plants	≥ 1 MW but < 50 MW	≥ 50 MW
8.	Geothermal Facilities	≥ 1 MW but < 50 MW	≥ 50 MW
9.	Solar Power Plants	≥ 1 MW but < 5 MW	≥ 5 MW and ≥ 100 ha
10.	Oil or Gas Transmission or Distribution Systems	< 10 km	≥ 10 km
11.	Petroleum Refineries or Natural Gas Refineries		All sizes

<sup>&</sup>lt;sup>1</sup> In general, when criteria for an economic activity are grouped together with "and" all such criteria must be met. This means for example that to be categorized as an IEE type economic activity, the economic activity must meet all the IEE criteria that are grouped together with "and" for that specific economic activity

<sup>&</sup>lt;sup>2</sup> In general, when criteria for an economic activity are grouped together with "or" at least one of such criteria must be met. This means for example that to be categorized as an EIA type economic activity, the economic activity must meet at least one of the EIA criteria that are grouped together with "or" for that specific economic activity

No.	Type of Economic Activity	Criteria for IEE Type Economic Activities <sup>1</sup>	Criteria for EIA Type Economic Activities <sup>2</sup>
	(Include manufacturing of liquefied petroleum gas (LPG), Mo-Gas (motor gasoline), kerosene, diesel oil, heating oil, fuel oil, bitumen, asphalt, sulphur, and intermediate products (e.g. propane / propylene mixtures, virgin naphtha, middle distillate and vacuum distillate) for the petrochemical industry)		
12.	Oil or Natural Gas Terminals		All sizes
13.	Filling Stations (including Liquid Petroleum Gas (LPG) and Compressed Natural Gas (CNG)	> 10 m <sup>3</sup> fuel storage capacity	All activities where the IEE process yields a recommendation to do an EIA
14.	Petroleum Depot or Liquid Gas Depot	Storage capacity Petroleum < 10,000 t Liquid gas < 2500 t	Storage capacity Petroleum ≥ 10,000 t Liquid gas ≥ 2500 t
15.	Electrical Power Transmission Lines < 230 kV	< 50 km	≥ 50 km
16.	Electrical Power Transmission Lines ≥ 230 kV		All sizes
17.	High Voltage Transformer Substations	< 10 ha	≥ 10 ha
18.	Petroleum or Gas Exploration by means of Geophysical Drilling	All sizes	All activities where the IEE process yields a recommendation to do an EIA
19.	Petroleum-based Organic Chemicals Manufacturing		All sizes
20.	Natural Gas Processing Plants Production of liquid petroleum products, which may include naphtha, gasoline, kerosene, diesel fuel, waxes, and lubes, or methanol		All sizes
21.	Natural Gas Liquefaction Plants		All sizes

	AGRICULTURE AND FORESTRY DEVELOPMENT			
22.	Plantation Crop Production (e.g. rubber, palm oil, citrus fruits, cocoa, coffee, tea, bananas, sugar cane)	≥ 200 ha but < 500 ha	≥ 500 ha	
23.	Annual Crop Production (e.g. cereals, pulses, roots, tubers, oil-bearing crops, fibre crops, vegetables, and fodder crops)	≥ 500 ha but < 3,000 ha	≥ 3,000 ha	
24.	Clear-cut Logging	< 500 ha	≥ 500 ha	
25.	Concession Forest	< 10,000 ha	≥ 10,000 ha	
26.	Irrigation Systems	≥ 100 ha but < 5,000 ha	≥ 5,000 ha	
27.	Livestock Farms (e.g., cows, buffaloes, horses, goats, sheep and others)	≥ 500 LSU but < 3,000 LSU (LSU: Livestock Units)	≥ 3,000 LSU	
28.	Farms for Poultry and Other Commercially Raised Fowl	Poultry, ducks, turkeys ≥ 5,000 but < 20,000 Ostriches ≥ 50 but < 200 Quails ≥ 25,000 but < 100,000	Fowls ≥ 20,000 ostriches ≥ 200 quail ≥ 100,000	
29.	Pig Farms	≥ 2,000 pigs but < 5,000 pigs	≥ 5,000 pigs	
30.	Fish Raising and Aquaculture in ponds	Total pond area ≥ 10 ha	All activities where the IEE process yields a recommendation to do an EIA	
31.	Fish Raising and Aquaculture (raising fish in cages in a river)	≥ 1,000 m <sup>2</sup> Facility surface area or ≥ 100 t biomass design capacity	All activities where the IEE process yields a recommendation to do an EIA	
32.	Raising and Caring for Wild Animals	All sizes	All activities where the IEE process yields a recommendation to do an EIA	
33.	Reptile Farms	alligators, monitor lizards or pythons < 1,000 reptiles other reptiles < 5,000 reptiles	≥ 1,000 alligators, monitor lizards or pythons ≥ 5,000 snakes or other reptiles	

	MANUFACTURING  Food and Beverages Manufacturing			
Food				
34.	Meat Processing Plants (slaughter of cattle, pigs, sheep and other livestock)	≥ 15 t/d but < 50 t/d carcase production	≥ 50 t/d carcase production	
35.	Poultry Processing Plants (slaughter of poultry and other commercially raised fowl)	≥ 15 t/d but < 50 t/d carcase production	≥ 50 t/d carcase production	
36.	Fish Processing Plants (fish, crustaceans, gastropods, cephalopods, and Bivalves. Includes by-products such as fish oil and fish meals)	≥ 15 t/d but < 75 t/d	≥ 75 t/d	
37.	Food and Beverage Processing Facilities (processing of beef, pork, mutton and poultry meats, vegetable, and fruit raw materials into value-added food and non-fermented beverage products for human consumption)	≥ 10 t/d but < 20 t/d	≥ 20 t/d	
38.	Dairy Processing Plants (reception, storage, and industrial processing of raw milk and the handling and storage of processed milk and dairy products)	≥ 200 t/d raw milk on annual average basis	All activities where the IEE process yields a recommendation to do an EIA	
39.	Manufacture of Animal Feeds	< 300 t/d product and < 600 t/d if the production is operating a maximum of 90 d/a	≥ 300 t/d product or ≥ 600 t/d if the production is operating a maximum of 90 d/a	
40.	Manufacture of Starches and Starch Products	< 300 t/d product and < 600 t/d if the production is operating a maximum of 90 d/a	≥ 300 t/d product or ≥ 600 t/d if the production is operating a maximum of 90 d/a	
41.	Manufacture of Grain Mill Products (grain milling, rice milling, production of rice flour, vegetable milling, manufacture of cereal breakfast foods, manufacture of flour)	< 300 t/d product and < 600 t/d if the production is operating a maximum of 90 d/a	≥ 300 t/d product or ≥ 600 t/d if the production is operating a maximum of 90 d/a	

42.	Vegetable Oil Production and Processing Facilities	< 300 t/d product and < 600 t/d if the production is operating a maximum of 90 d/a	≥ 300 t/d product or ≥ 600 t/d if the production is operating a maximum of 90 d/a
43.	Sugar Manufacturing Plants (including by-products such as ethanol)	< 300 t/d refined sugar and < 600 t/d if the production is operating a maximum of 90 d/a	≥ 300 t/d refined sugar or ≥ 600 t/d if the production is operating a maximum of 90 d/a
44.	Alcohol, Wine and Beer Production Factories (distilleries, wineries and breweries)	< 300 t/d product and < 600 t/d if the production is operating a maximum of 90 d/a	≥ 300 t/d product or ≥ 600 t/d if the production is operating a maximum of 90 d/a
45.	Tobacco Processing Plants	< 15 t/d product	≥ 15 t/d product
Garme	ents, Textiles and Leather Products		
46.	Textile Manufacturing Facilities (production of yarn, fabric, and finished goods based on natural fibres, synthetic fibres and/or regenerated fibres)	All sizes	All activities where the IEE process yields a recommendation to do an EIA
47.	Leather Products Manufacturing (includes synthetic leather, handbags, luggage, saddle, footwear, etc.)	≥ 1,000 t/a	All activities where the IEE process yields a recommendation to do an EIA
48.	Tanning and Leather Finishing	< 12 t/d finished products	≥ 12 t/d finished products
Wood	Manufacturing		
49.	Sawmilling and Manufactured Wood Products	Sawmills: Input $\geq 3,000 \text{ m}^3/\text{a}$ but $< 50,000 \text{ m}^3/\text{a}$ Wood products: Input $\geq 1,000 \text{ m}^3/\text{a}$ but $< 15,000 \text{ m}^3/\text{a}$	Sawmills: Input ≥ 50,000 m³/a Wood products: Input ≥ 15,000 m³/a
50.	Board and Particle-based Products Manufacturing (board and particle-based products, plywood and glued and laminated Products, board from other raw materials such as sugar cane	< 600 m <sup>3</sup> /d	≥ 600 m <sup>3</sup> /d

	bagasse, straw, and linen)		
51.	Pulp and/or Paper Mills	≥ 20 t/d but < 50 t/d	≥ 50 t/d
52.	Printing or other Surface Treatment facilities (using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating)	≥ 6 kg/h but < 150 kg/h consumption of organic solvents	≥ 150 kg/h or ≥ 200 t/a consumption of organic solvents
Chem	icals Manufacturing		
53.	Large Volume Inorganic Compounds Manufacturing and Coal Tar Distillation (includes ammonia, acids (nitric, hydrochloric, sulphuric, hydrofluoric, phosphoric acid), chlor-alkali (e.g. chlorine, caustic soda, soda ash, etc.), carbon black, and coal tar distillation (naphthalene, phenanthrene, anthracene)		All sizes
54.	Petroleum-based Polymers Manufacturing Plants		All sizes
55.	Coal Processing Plants (processing of coal into gaseous or liquid chemicals including fuels)		All sizes
56.	Phosphate Fertilizer Manufacturing Plants (include production of phosphoric acid, single superphosphate (SSP), triplesuperphosphate (TSP), and compound fertilizers (NPK))		All sizes
57.	Nitrogenous Fertilizer Production Plants (include ammonia based nitrogenous fertilizers, including ammonia (NH3), urea, nitric acid (HNO <sub>3</sub> ), ammonium nitrate, calcium ammonium nitrate (CAN), ammonium sulphate and mixed nitrogenous fertilizers)		All sizes
58.	Pesticide Manufacturing, Formulation, and Packaging Plants		All sizes

59.	Oleochemicals Manufacturing Plants (production of fatty acids, glycerin, and biodiesel using fats and oils from vegetable or animal sources)		All sizes
60.	Pharmaceuticals and Biotechnology Manufacturing Plants		All sizes
61.	Rubber and Latex Processing Plants	≥ 2,000 t/a	All activities where the IEE process yields a recommendation to do an EIA
62.	Explosives Manufacturing Plants		All sizes
63.	Other Basic Organic Chemicals Manufacturing Plants		All sizes
64.	Other Basic Inorganic Chemicals Manufacturing Plants		All sizes
65.	Other Chemical Products Manufacturing Plants (e.g. paints, inks, varnishes, soap, detergents, perfumes, pyrotechnic products, photographic chemicals)	≥ 5 t/d but < 10 t/d	≥ 10 t/d
66.	Glass Manufacturing Plants	All sizes	All activities where the IEE process yields a recommendation to do an EIA
67.	Ceramic Tile and Sanitary Ware Manufacturing Plants	≥ 1,000 t/a fine ceramics ≥ 10,000 t/a ceramic tiles	All activities where the IEE process yields a recommendation to do an EIA
Const	ruction industry		
68.	Cement and Lime Manufacturing Plants	Cement < 30 t/h Lime < 50 t/d	Cement ≥ 30 t/h Lime ≥ 50 t/d
69.	Other Construction Supplies and Materials Production	≥ 30,000 t/a but < 50,000 t/a	≥ 50,000 t/a
70.	Asphalt Production Plants	< 100 t/d	≥ 100 t/d
Metal,	Machinery and Electronics		
71.	Metal, Plastic, and Rubber Products	≥ 1,000 m <sup>2</sup> production area, or	All activities where the IEE process yields a

	Manufacturing Plants (material processing operations common to multiple industries engaged in the manufacture of metal, plastic, and rubber products)	≥ 6 kg/h consumption of organic solvents	recommendation to do an EIA
72.	Base Metal Smelting and Refining Plants (base metal smelting and refining of lead, zinc, copper, nickel, and aluminium)	Ferrous metal < 20 t/d production capacity Non-ferrous metal < 20 t/d melting capacity except for lead and cadmium < 4 t/d melting capacity	Ferrous metal ≥ 20 t/d production capacity Non-ferrous metal ≥ 20 t/d melting capacity except for lead and cadmium ≥ 4 t/d melting capacity
73.	Steel Mills (manufacture of pig iron, raw or low alloy steel)	< 2.5 t/h	≥ 2.5 t/h
74.	Foundries (casting ferrous (iron and steel) and nonferrous (primarily aluminium, copper, zinc, lead, tin, nickel, magnesium, and titanium) metals)	Ferrous metal < 20 t/d production capacity Non-ferrous metal < 20 t/d melting capacity except for lead and cadmium < 4 t/d melting capacity	Ferrous metal ≥ 20 t/d production capacity Non-ferrous metal ≥ 20 t/d melting capacity except for lead and cadmium ≥ 4 t/d melting capacity
75.	Semiconductors and Other Electronics Manufacturing Plants (manufacturing of semiconductors, printed circuit boards (PCBs), printed wiring assemblies (PWAs), screens, passive components, and magnetic devices)	≥ 1,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the IEE process yields a recommendation to do an EIA
76.	Electronic and Electric Equipment Manufacturing Plants (Computers, communication equipment, consumer electronics, laboratory equipment, electric motors, electric lightning etc.)	≥ 1,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the IEE process yields a recommendation to do an EIA
77.	Batteries and Accumulators Manufacturing Plants	< 3,000 t/a	≥ 3,000 t/a
78.	Machinery, Vehicles and Equipment Manufacturing Plants	≥ 1,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the IEE process yields a recommendation to do an EIA
79.	Weapons and Ammunition Manufacturing Plants		All sizes
80.	Shipyards and Ship Building Enterprises	< 1 ha	≥ 1 ha

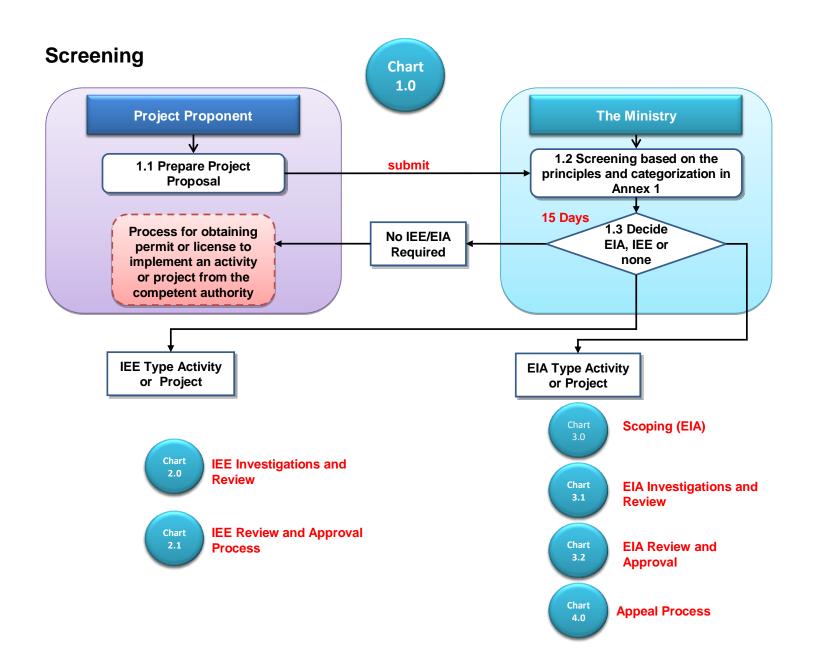
		and	or	
		< 20,000 t lifting capacity	≥ 20,000 t lifting capacity	
81.	Domestic Appliances Manufacturing Plants	≥ 1,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the IEE process yields a recommendation to do an EIA	
		WASTE MANAGEMENT		
82.	Non-Hazardous Waste Disposal Facilities	Landfills < 10 t/d and total capacity < 25,000 t Others < 50 t/d	Landfills ≥ 10 t/d or total capacity ≥ 25,000 t Others ≥ 50 t/d	
83.	Non-Hazardous Waste Incinerators	< 3 t/h	≥ 3 t/h	
84.	Non-Hazardous Waste Recycling, Recovery or Reuse Facilities	< 50 t/d	≥ 50 t/d	
85.	Hazardous Waste Disposal Facilities		All sizes	
86.	Hazardous Waste Recycling, Recovery or Reuse Facilities	< 10 t/d	≥ 10 t/d	
87.	Wastewater Treatment Plants (centralized systems)		All sizes	
88.	Wastewater and Storm Water Collection Systems	Length ≥ 1 km but < 10 km	≥ 10 km	
		WATER SUPPLY		
89.	Potable Water Treatment Plants	≥ 10,000 L/d but < 20,000 L/d	≥ 20,000 L/d	
90.	Groundwater Development for Industrial, Agricultural or Urban Water Supply	< 4,500 m <sup>3</sup> /d	≥ 4,500 m <sup>3</sup> /d	
	INFRASTRUCTURE AND SERVICE DEVELOPMENT			
91.	Lake, River and Channel Land Filling which impacts on the public	< 50 ha	≥ 50 ha	
92.	Dams and Reservoirs	Dam height < 15 m and Reservoir area < 400 ha	Dam height ≥ 15 m or Reservoir area ≥ 400 ha	

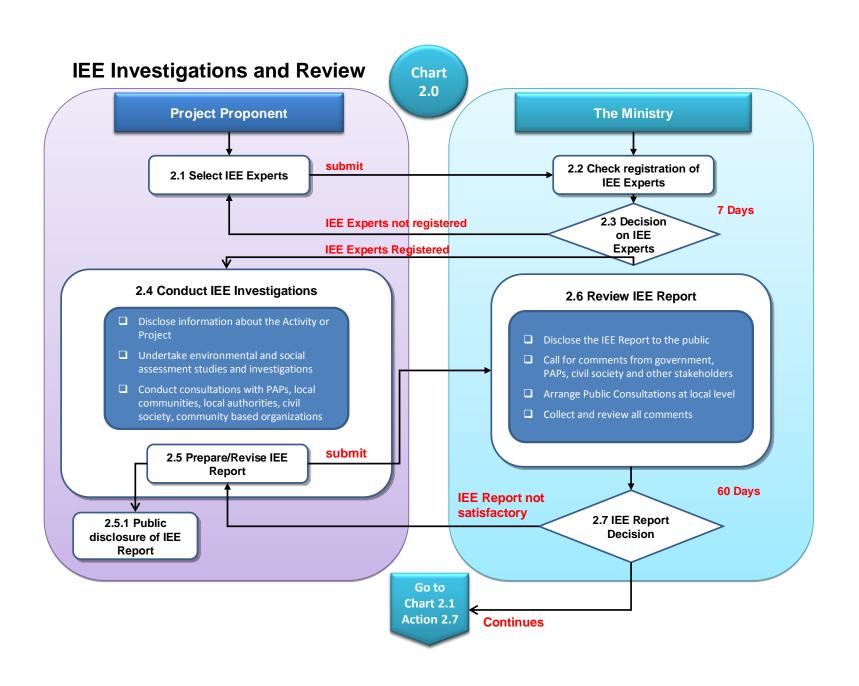
93.	Shipping (operation and maintenance of ships used for the transport of bulk cargo, and goods, and ship breaking)	All sizes	All activities where the IEE process yields a recommendation to do an EIA		
94.	Telecommunications (fixed line and wireless transmission infrastructure, including long distance terrestrial and submarine cables, radio and television broadcasting, and associated telecommunications and broadcasting installations and equipment)	All sizes	All activities where the IEE process yields a recommendation to do an EIA		
95.	Ports, Harbours, and Terminals (ports, harbours, and terminals for cargo and passengers transfer)	< 25 ha	≥ 25 ha		
96.	Hospitals	All sizes	All activities where the IEE process yields a recommendation to do an EIA		
97.	Golf courses	9 holes	18 holes		
98.	Industrial Zone Construction and Development		All sizes		
99.	Tourism and Hospitality Development	≥ 80 rooms but < 200 rooms and total utilization area ≥ 4,000 m² but < 10,000 m²	≥ 80 rooms or total utilization area is ≥ 10,000 m²		
100.	Cemeteries and Crematoria (for burial, incineration and other forms)	All sizes	All activities where the IEE process yields a recommendation to do an EIA		
101.	Other Large Civil Works Construction (embankments, seawalls, offshore breakwater)	< 2 km and < 25 ha	≥ 2 km or ≥ 25 ha		
102.	Dredging	$\geq$ 10,000 m <sup>3</sup> /a but < 200,000 m <sup>3</sup> /a	≥ 200,000 m³/a		
TRANSPORTATION					
103.	Railways (construction and maintenance of rail infrastructure and operation of rolling stock)	Length < 1 km	Length ≥ 1 km		

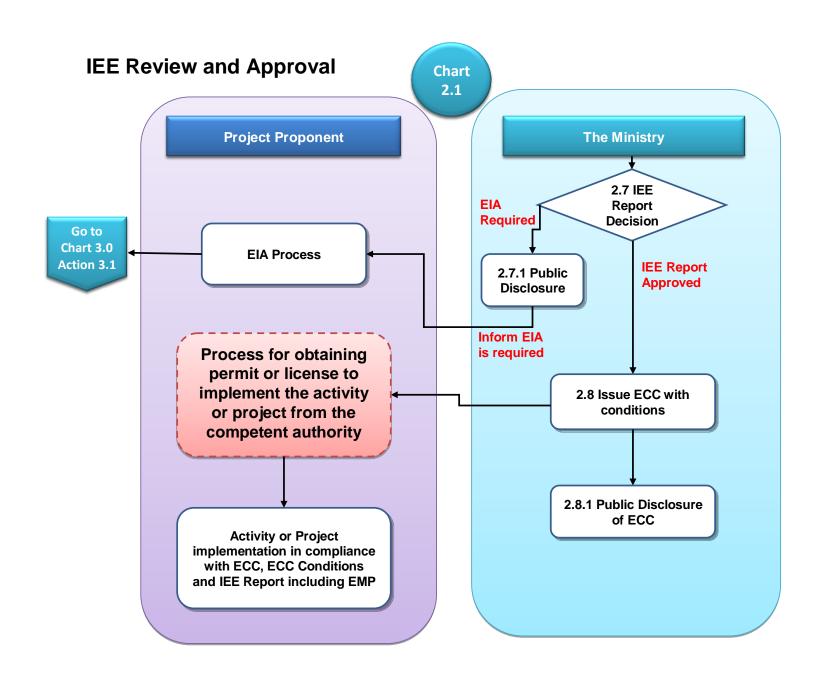
104.	Airports	Runway length < 2,100 m	Runway length ≥ 2,100 m
105.	Bridges and Viaducts, new construction	Length ≥ 0.80 km but < 10 km	Length ≥ 10 km
106.	New Road Construction or Widening (national, provincial, district and urban roads)	Length ≥ 1 km but < 50 km	Length ≥ 50 km
107.	Tunnels	Length < 1 km	Length ≥ 1 km
108.	Road Improvement (national, provincial and district roads)	Length ≥ 1 km	All activities where the IEE process yields a recommendation to do an EIA
	M	INING AND EXTRACTIVE INDUSTRY	
109.	Extraction of Groundwater (for Industrial, Agricultural and Urban consumption)	< 4,500 m <sup>3</sup> /d	≥ 4,500 m³/d
110.	Extraction of Rock, Gravel or Sand from a river or marine waters	$\geq$ 1,000 m <sup>3</sup> /a but < 5,000 m <sup>3</sup> /a	≥ 5,000 m <sup>3</sup> /a
111.	Construction Materials Extraction (aggregates, limestone, slates, sand, gravel, clay, gypsum, feldspar, silica sands, and quartzite, and extraction of dimension stone)	< 100,000 t/a	≥ 100,000 t/a
112.	Coal Mining - Open Cast	< 100,000 t/a coal	≥ 100,000 t/a coal
113.	Coal Mining - Underground	< 125,000 t/a coal	≥ 125,000 t/a coal
114.	Extraction of Industrial Minerals Open Pit - Other than Construction Materials (asbestos, bentonite, granite, kaolin, marble, phosphate, potash, salt, sulphur, etc.)	< 75,000 t/a ore	≥ 75,000 t/a ore
115.	Extraction of Industrial Minerals Underground - Other than Construction Materials (asbestos, bentonite, granite, kaolin, marble, phosphate, potash, salt, sulphur, etc.)	< 100,000 t/a ore	≥ 100,000 t/a ore
116.	Extraction of Ferrous and Non-ferrous Metals and Precious Metal Ore - Open Pit (includes rare earth metal ore)	< 50,000 t/a ore	≥ 50,000 t/a ore

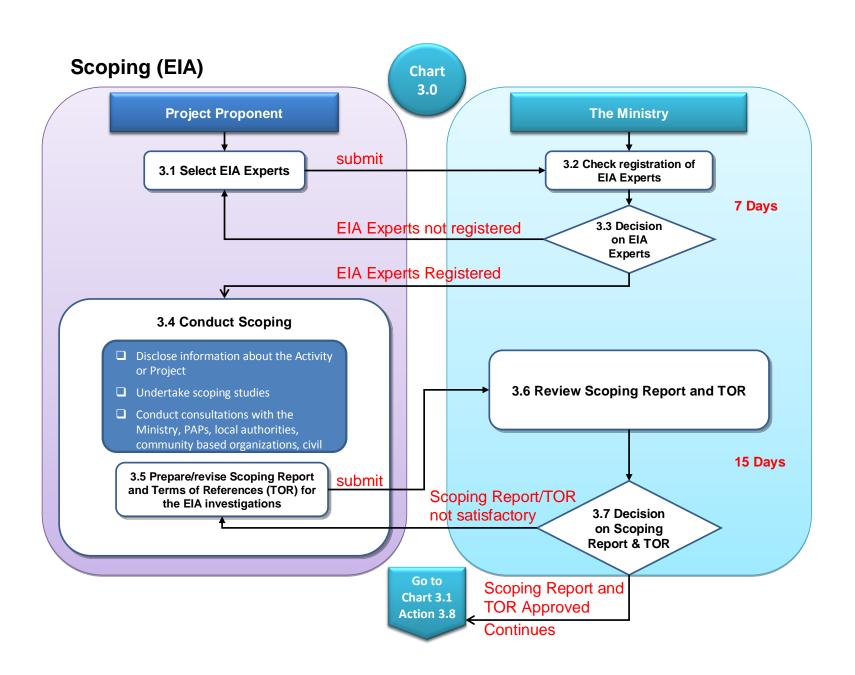
117.	Extraction of Ferrous and Non-ferrous Metals and Precious Metal Ore - Underground (includes rare earth metal ore)	< 75,000 t/a ore	≥ 75,000 t/a ore
118.	Placer or Alluvial Mining (removing gold, other metals of interest or gem stone from stream sediments and floodplains)	< 50,000 t/a ore	≥ 50,000 t/a ore
119.	Dredge Mining (limenite, rutile, zircon and monazite)	< 50,000 t/a ore	≥ 50,000 t/a ore
120.	In Situ Leaching		All sizes
121.	Onshore Oil and Gas Development (seismic exploration; exploration and production drilling; development and production activities; transportation activities including pipelines; other facilities including pump stations, metering stations, pigging stations, compressor stations and storage facilities; ancillary and support operations; and decommissioning)		All sizes
122.	Offshore Oil and Gas Development (seismic exploration, exploratory and production drilling, development and production activities, offshore pipeline operations, offshore transportation, tanker loading and unloading, ancillary and support operations, and decommissioning)		All sizes

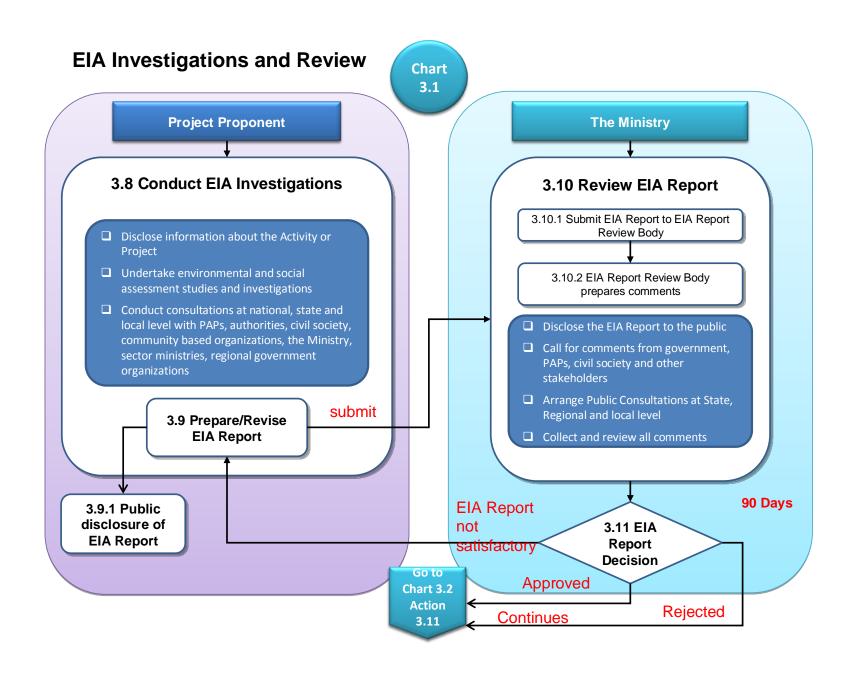
## **Annex 2** Environmental Assessment Procedure Flowchart

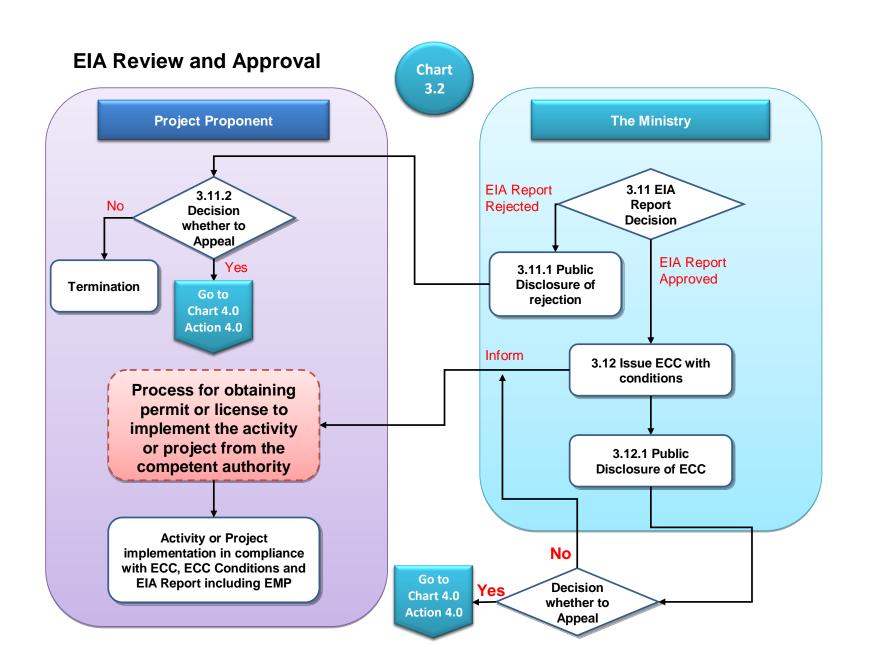


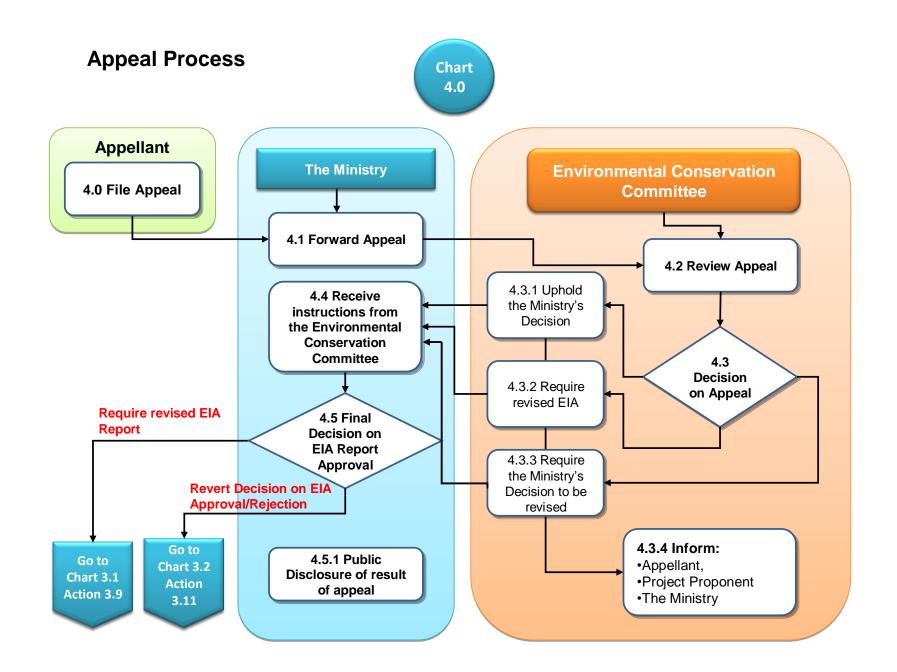












## **Annex 3** Prescribed Penalties Under Procedure