EIA REPORT – TERMS OF REFERENCE TEMPLATE

SECTION 1 – EXECUTIVE SUMMARY

Present a concise, non-technical outline of the proposed project and each chapter of the EIA report. Include the results of impact and risk assessments, the proposed environmental management and mitigation measures, and the conclusions reached.

Translate the executive summary into relevant local language(s) to support community interest and participation in the EIA process.

SECTION 2 – TABLE OF CONTENTS

SECTION 3 – GLOSSARY, LIST OF ACRONYMS/ABBREVIATIONS

SECTION 4 – INTRODUCTION

Provide an **overview of the project and the proponent**, including information such as:

4.1 Project name, background and general description

4.2 Project purpose and objectives (including environmental performance objectives)

4.3 Project justification (including project need)

4.4 Profile of project proponent

4.5 Contact details for the proponent/project manager

SECTION 5 – POLICY AND LEGAL FRAMEWORK

Outline **relevant policies, guidelines and laws** that apply to the project and the approvals that need to be obtained from different government agencies, for instance:

5.1 National, regional, provincial or customary laws and regulations

5.2 Multilateral Environmental Agreements

5.3 Industry sector plans, policies or codes of practice

5.4 Health, safety, hazard and risk management standards

5.5 Current agreements between government and the proponent

5.6 Environmental policies of any financing/funding organisations involved in the project

5.7 The proponent's environmental management and compliance record

SECTION 6 – PROJECT DESCRIPTION AND JUSTIFICATION

Present a **detailed description of the project** and provide justification for its development, covering:

6.1 Project details

- Project footprint (i.e. location, size and layout), including a description of how the project sits within the landscape/seascape and its area of influence
- Maps of the project footprint and surrounding area of influence, illustrating its proximity to environmental features (e.g. topography, existing land/sea use, watercourses, resource deposits, towns/villages/settlements, transport infrastructure, natural/cultural/ecological assets)
- Project activities, components, infrastructure and design, including technology and equipment likely to be used
- Predicted resource and public infrastructure requirements, including rates of extraction or demand (e.g. energy, water, transport, minerals, hazardous materials), and any competition for resources or infrastructure that may occur with other projects or the local community
- Workforce size and accommodation
- Predicted type and quantity of waste outputs (e.g. liquid and solid wastes, gas/air emissions)
- Implementation schedule, with key steps and tasks (e.g. timeline for construction, operation, decommissioning, rehabilitation, closure), and expected project lifespan
- Project cost estimates and funding sources, including any uncertainties or assumptions underlying the estimates

6.2 Analysis of alternatives

- Alternative project sites, designs, technologies, timelines; including alternatives that address environmental hazards and environmental change processes
- Advantages and disadvantages of alternatives (e.g. cost, availability of technology)
- Rationale for selection of preferred options

6.3 Project benefits

- Benefits accruing to the local area, island, country, region (e.g. new or upgraded physical infrastructure, improved environmental conditions, increased resource availability, employment/livelihood/training opportunities, tax revenue, royalties, better health or educational facilities, community development programmes)
- Project relevance in the light of existing local or national development and/or future development plans

6.4 Cost-benefit analysis

- Identification, valuation and comparison of the costs (disadvantages) and benefits (advantages) of the project, from a whole-of-society perspective (i.e. including the perspectives of the proponent, government and stakeholders)

SECTION 7 – DESCRIPTION OF THE BASELINE ENVIRONMENT

Provide a detailed description of baseline (i.e. current or existing) environmental conditions **relevant to the project and its area of influence**, to develop awareness and understanding of important environmental features, patterns and trends; to support identification of potential impacts of the project on the environment and potential impacts of the environment on the project (section 8); and to assist with the formulation of impact mitigation measures (section 10). The level of examination and effort that is required to adequately describe different aspects of the environment will depend on the type of project, its scale of operation, its physical setting and its area of influence.

In detailing the baseline environment it is important to state what is known or unknown, what assumptions have been made, what methods have been used for data collection and how reliable the data/information is. Studies or surveys undertaken by the proponent, their consultant, or third party researchers, should be adequately detailed and referenced (section 14).

Where relevant, the following aspects of the environment should be described:

7.1 Climate (e.g. including temperature, rainfall/evaporation, flooding, drought, winds, extreme weather events, climate change projections and climate change elements likely to affect the project)

7.2 Topography, geology and soils (e.g. significant landscape features and characteristics; landscape gradient or slope; land capability and availability; seismic characteristics and earthquake and volcanic potential; areas vulnerable to landslides, rock fall, erosion)

7.3 Land tenure, zoning and use (e.g. community food gardens, agriculture, national parks, sensitive habitat, community or public reserves, village settlements, cemeteries, manufacturing industry)

7.4 Water (e.g. surface and groundwater quantity and quality; site hydrology; local catchment area; upstream and downstream water uses/users; areas vulnerable to flooding, inundation or storm surges)

7.5 Marine (e.g. coastal hydrology, tides, waves, currents, storm surge, salinity, sea water temperature, suspended load, seabed bathymetry)

7.6 Air (e.g. existing sources of air emissions; ambient air quality parameters such as nitrogen dioxide, sulphur dioxide, carbon monoxide, lead, PM_{10} particles; location of nearest sensitive receptors)

7.7 Noise (e.g. baseline noise levels and noise pollution; location of nearest sensitive receptors)

7.8 Flora (e.g. plant species and communities within the project and surrounding area; native, endemic, threatened, invasive or culturally-significant species; areas subject to previous habitat clearing or disturbance; species, plant communities or habitat vulnerable to environmental hazards and environmental change)

7.9 Animal life (e.g. animal species and communities within the project and surrounding area; native, endemic, threatened, migratory, invasive or culturally-significant species; habitat within and adjacent to the project area suitable for species of conservation significance; species, animal communities or habitat vulnerable to environmental hazards and environmental change)

7.10 Human communities (e.g. towns/villages/settlements; population and local demographics; access to education, literacy level and educational attainment; housing; energy and water resource access and use; land use, gardens and subsistence dependency; natural resource use; transport and other infrastructure; cultural traditions; community structure and governance systems; marginalised groups; community health status; social infrastructure and services e.g. health care, education, recreation; landscape and visual amenity; vulnerability to environmental hazards and environmental change)

7.11 Local and national economy (e.g. skills, livelihoods and formal/informal employment; economic and business conditions; distribution of income; major sectors and industries)

7.12 Social/cultural resources and heritage (e.g. objects or sites of social/cultural significance, cultural and archaeological assets)

SECTION 8 – IMPACT ASSESSMENT

8.1 Assess and describe **potential impacts of the project on the environmen**t. The impact assessment should detail negative and positive; immediate, short-term and long-term; unavoidable, irreversible and reversible impacts. In conducting the impact assessment give consideration to:

- all relevant aspects of the environment (section 7, description of the baseline environment) and how they are likely to be changed or affected by the project, either directly or indirectly. This should include assessment of how the project may exacerbate environmental hazards and environmental change processes
- the nature of changes or affects, including negative consequences and/or expected benefits
- over what area, or on what scale, changes or affects are likely to take place
- changes or affects that will arise at different stages of the project (e.g. during construction, operation, production, decommissioning, closure)

8.2 Assess and describe **potential impacts of the environment on the project**. The impact assessment should detail negative and positive; immediate, short-term and long-term; unavoidable, irreversible and reversible impacts. In conducting the impact assessment give consideration to:

- all relevant environmental hazards, and how they are likely to change or affect the project, either directly or indirectly (e.g. weather-related hazards such as heavy rain, cyclones; water-related hazards such as flooding, tidal waves; geological hazards such as landslides, ground failure, earthquakes, tsunami)
- environmental change processes, and how they are likely to change or affect the project, either directly or indirectly (e.g. climate change and associated processes such as sea level rise, increased cyclone intensity; loss of land from coastal erosion and shoreline change)
- the nature of changes or affects, including negative consequences and/or expected benefits
- over what area, or on what scale, changes or affects are likely to take place

Explain the methods used for impact assessment, such as modelling studies, site or field-based surveys, or review of existing similar situations or previous studies.

In detailing impacts it is important to acknowledge what is known or unknown, what assumptions have been made, how reliable the data and analyses are, and whether any information deficiencies or uncertainties have influenced the conclusions reached.

SECTION 9 – CUMULATIVE IMPACTS

Examine the project in the context of **previous, existing and known future developments**. This will help to ensure that the project's potential impacts are not considered in isolation and that cumulative impacts have been adequately considered in the development of the EIA report and EMP.

Cumulative impact assessment can include an evaluation of changes in:

9.1 Land and seascape processes and functions (e.g. landscape hydrology, coastal stability)

9.2 Natural resource quality and availability (e.g. water, energy, critical habitat for important flora and fauna)

9.3 Social and community dynamics (e.g. population growth, traffic volumes, in-migration)

9.4 Economic conditions (e.g. industry development, job opportunities, cost of living)

For identified cumulative impacts, assess if they will be permanent. If they are not likely to be permanent, specify what steps will be taken to minimise long-term negative effects.

SECTION 10 – ENVIRONMENTAL MANAGEMENT

Provide a **draft environmental management plan (EMP)**, including a detailed discussion of the mitigation measures that can be feasibly undertaken, and explain how these mitigation measures will address the identified negative and positive impacts.

Also identify any best practices or industry standards the proponent intends to commit to, as well as any optimisation measures to be taken to strengthen or enhance positive impacts.

The draft EMP should cover all phases of the project, from construction through to operation, decommissioning, closure and post-closure (where relevant). It should be further developed and refined following the conclusion of the EIA process. Provision should also be made for periodic review of the EMP once the project becomes operational.

Recommended topics to be included in the EMP document:

10.1 Environmental performance objectives for the project

10.2 The proponent's environmental management framework, i.e. who will have responsibility for overseeing the EMP, the implementation of different mitigation measures, incident response, environmental monitoring and reporting

10.3 Specialised management plans with a high level of operational detail for sensitive or high-risk aspects of the project (e.g. a waste management plan, a water management plan, an erosion and sediment control plan, a disaster management plan, social impact management plan – which may include a benefit sharing agreement, resettlement plan, in-migration management plan, climate change adaptation plan)

10.4 Evidence that mitigation measures and specialised management plans are likely to be effective when implemented

10.5 A detailed monitoring plan, including performance criteria for measuring the extent of environmental impacts, and/or the success of mitigation measures; and for ensuring early detection of impacts. The monitoring plan should also include a schedule for reporting on project activity outcomes and monitoring results to regulatory authorities; and it should list the regulatory authorities that will be reported to

10.6 Environmental management expectations and stakeholder consultation requirements to be placed on project contractors

10.7 Provisions for independent auditing (especially in the case of high-risk projects)

10.8 Staffing and equipment requirements, allocated budget, and any training programmes or capacity development necessary to ensure successful EMP implementation

10.9 A process for responding to accidents, unanticipated or emergency incidents

10.10 A process for managing and responding to stakeholder concerns or complaints

It is advisable to cross-reference different elements of the EMP to relevant text in the EIA report.

SECTION 11 – LOCAL COMMUNITY, LAND/RESOURCE OWNER AND WIDER STAKEHOLDER ENGAGEMENT AND CONSULTATION

Include details of **engagement and consultation activities** such as:

11.1 Dates, types and methods of engagement and consultation, and outcomes to date

11.2 Stakeholder mapping and identification of key stakeholders

11.3 Key findings from engagement and consultation, including a summary of issues and concerns raised by various stakeholder groups (directly affected persons; businesses; NGOs; civil society, women's, leaders and church groups) and how these will be addressed or have been incorporated into project design and mitigation measures

11.4 Future engagement and consultation activities planned to ensure stakeholders remain informed about the project

11.5 Information on negotiation and agreements with directly affected persons and land/resource owners

SECTION 12 – CONCLUSIONS AND RECOMMENDATIONS

Present the main conclusions of the EIA report and the proponent's suggested recommendations for progressing their project, including key environmental management and mitigation measures that should be undertaken.

SECTION 13 – DISCLOSURE OF CONSULTANTS

State the names, qualifications and contact details of all consultants responsible for preparing the EIA report, and the services or work they completed.

SECTION 14 – REFERENCES

Appropriately reference all information sources that have been used or consulted during EIA report preparation (e.g. using the Harvard referencing system). Information sources may include studies or surveys undertaken by the proponent, their consultant, or third party researchers.

SECTION 15 – APPENDICES

Include appendices that support the main text and that do not contain unnecessary information. Appendices may present:

- Relevant environmental studies and reports
- Detailed technical information
- Draft management plans
- A table listing how the ToR have been addressed, cross-referenced to relevant sections of the EIA report
- A table listing environmental mitigation/management commitments made by the proponent
- Evidence of project support from stakeholders

GENERAL ADVICE FOR EIA REPORT PREPARATION

- The EIA report should be based on a level of analysis and detail that reflects the significance of the project's potential environmental impacts, and that allows government and interested stakeholders to clearly understand the project's likely environmental consequences
- Information provided in the report should be objective, clear and easily understood by the general reader
- Different sections of the ToR may be combined or re-ordered, if this helps to present information in a clear and logical manner
- Maps, plans and diagrams should be prepared using an appropriate scale, resolution and clarity
- Technical jargon should be avoided or accompanied by a clear, understandable explanation
- Cross-referencing should be used to avoid unnecessary duplication of text
- Key project impacts should be explained in a culturally-appropriate format, using graphics and illustrations to assist with interpretation, where relevant
- Spatial data presented in the report should be provided to government as importable Geographic Information System shape files

Soil erosion and sediment control measures are important for developments that involve land-moving and earthworks. If these measures are not effectively applied, adjacent waterways can suffer from siltation, which can affect water quality, coral reefs and fish nurseries. Photo: Melanie Bradley