

**TERMS OF REFERENCE FOR PREPARING
ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR
"CATEGORY C PROJECTS"**

SREP Extended Biogas Program

Background

The SREP Sub project interventions must assure environmental and social safeguards during construction and implementation phase. The projects with minimal environmental and social impacts which are categorized as "Category C" project during screening require preparation of Environmental and Social Management Plan (ESMP) before construction starts. In order to manage such minor environmental/social impacts, an ESMP shall be prepared. On behalf of developer, prequalified consulting firms (or any other expert consulting firm, if required) shall prepare ESMP document. The ESMP document will be reviewed for acceptance and clearance by AEPC/WB during the detailed feasibility study (DFS) phase.

The site specific ESMP will reflect the GON's and the WB's safeguard policy as well as measures to mitigate environmental and social impacts during construction and implementation phase. The developer must include ESMP and prescribed mitigation measures in DFS/ or DPR as well as cost envisaged for such measures in construction bid document to ensure the implementation of these safeguards during construction.

This Terms of Reference (ToR) guides prequalified consulting firms as well as developer to prepare site specific EMP document.

Description of Subproject and location

(Provide brief description of subproject, size, location, and inputs, process, and output. Brief description of environmental and social setting of the subproject site and vicinity).

Summary of Environmental and Social Screening

(Summarize Environmental and Social Screening findings, potential issues/ concerns, and recommendations)

Objectives

The objectives of the ESMP are:

- To assess, building on the potential impacts/ issues/ concerns identified during screening, the potential adverse environmental and social impacts
- To provide pragmatic and cost effective measures in order to avoid/ minimize / mitigate adverse potential impacts including potential alternatives in terms of locations, designs, etc.
- To provide mitigation measures
- To provide sub project level implementation and monitoring plan for assurance of implementation of environmental and social safeguards

Environmental and Social Management Plan (ESMP) Document

The developer/ proponent must prepare the subproject specific ESMP and submit to the AEPC for clearance, along with DFS/DPR, bid documents with cost estimates, specification, and contract/ agreement clauses. The ESMP must be integrated into the project's plan and design, budget, specifications, cost estimated, bid documents, contract/agreement clauses. Bid documents are only finalized when site-specific ESMP recommendations are adequately and appropriately incorporated in the plan and design, cost estimates, specification, and proponent's clauses. The AEPC/PIU, with help from Environmental and Social Focal Point/ specialist, will certify that ESMP recommendations are incorporated cost estimates and bid documents.

The ESMP shall be prepared on the basis of Environmental and Social Management Frameworks (EMF and SMF) and approved environmental and social screening report.

The ESMP report must include description of subproject and location (Brief description of subproject, size, location, and inputs, process, and outputs and brief description of environmental and social setting of the subproject site and vicinity). Similarly, the ESMP report must also include summary of Environmental and Social Screening (Summarize Environmental and Social Screening findings, potential issues/ concerns, and recommendations).

The ESMP shall present detail pictures of the project impacts and mitigation measures. The issues that can come under ESMP may vary from subproject to subproject. The generic environmental and social impacts¹, but not limited to, which may be posed by SREP biogas sub projects would be occupational safety and health, sanitation, foul odour, dust and air pollution control, increase in noise level in surroundings, slurry management, management of liquid/solid waste generated from pre-treatment and other processing, protection of water sources, tree cutting, disturbance to wildlife, loss of land/livelihood; income/sources of livelihood; loss of common property resources (CPRs) and/or access to CPRs, etc. The generic table of content and formats of Environmental and Social Mitigation Matrix and Environmental and Social Monitoring Matrix are provided in Annex 1 and 2.

The ESMP may include, inter alia, the following: (i) Alternatives - alternative measures for avoiding, minimizing, controlling adverse impacts (or for enhancing beneficial impacts); (ii) Mitigation -site-specific, cost effective and detailed measures for each impact that will reduce the identified adverse impact to acceptable levels; (iii) Capacity Development and Training/ awareness - specific and targeted training / awareness/ capacity building, if necessary (targeted to, for example, subproject staff, contractors, and community groups); (iv) Implementation Schedule and Cost Estimates - For all mitigation and capacity development, the ESMP provides (a) an implementation schedule for measures that must be carried as a part of the subproject, and (b) cost estimates for implementing the ESMP.

¹ See *Environmental Management Framework (EMF), and Social Management Framework (SMF)* for further details.

The ESMP shall also include the site specific monitoring plan illustrating indicators of monitoring, frequency, time of action and monitoring responsibility. Most of the monitoring responsibility during construction phase will be of Construction Company and of developer during implementation phase. Refer to EMF/ SMF document for further information regarding ESMP.

Scope of works

The Scope of Works includes, but not limited, to the following:

- (i) Collection and Review relevant literature (Screening Report, Subproject Technical Report/ feasibility and DFS/DPR; EMF & SMF; GoN and WB environmental and social policies, standards and guidelines applicable to the subproject; etc). This may also include, if relevant or necessary, review of the mitigation measures employed in similar activities/ to solve similar impacts in order to learn and adapt.
- (ii) Site visit/ field survey including walk-through the project site and make necessary measurement, inspect/ observe and discuss with local people/ agencies.
- (iii) Stakeholder consultations as part of ESMP preparation, including Focus Group Discussion with potentially affected people and/or with stakeholder agencies.
- (iv) Organize an interaction meeting among developer, AEPC, and potentially affected people and stakeholder agencies on the Draft ESMP.
- (v) Translation of Executive Summary of the ESMP into Nepali.

Human Resource

Developer shall hire environmental and social specialist to prepare ESMP. The environmental specialist should have at least Bachelors Degree in Environmental Science/ Environmental Management/ Environmental Engineering with at least 3year experience in environmental assessment, management, monitoring; or should have master's degree in environmental sciences, engineering, and management with at least 1 year working experience in this field.

The Social Specialist may be required if social screening envisaged moderate or significant social impacts and should have at least bachelor's degree in social sciences with adequate experience of handling social impacts of infrastructure projects.

Timeline

The estimated man days required for preparation of ESMP is tentatively 8 days (including field visit) for upto 100 m³ and 15 days (including field visit) for greater than 100 m³. A field visit is mandatory while preparing ESMP.

Cost of preparing ESMP

As ESMP is an integral part of detailed feasibility study, the total DFS cost shall include the cost of preparation of ESMP and any other cost associated thereof. The total DFS cost shall be borne by developer with 50% of approved total cost shared by AEPC.

Reporting

An ESMP shall be prepared by the prequalified consulting firm (expert or expert consulting firm can be hired, if required) on behalf of the developer. The ESMP shall be prepared during Detailed Feasibility Study (DFS)/ DPR phase. The ESMP shall be submitted to AEPC along with DFS report (Summary in main text of DFS report under Environmental and Social Safeguards chapter and detail ESMP in Annex of DFS Report; *Refer to Commercial/MSW DFS Guidelines*) for clearance and approval.

Some reference documents for preparation of ESMP

- Subproject specific Environmental and Social Screening Report
- Environmental Management Framework (EMF)
- Social Management Framework (SMF)
- National EIA Guidelines, NPC/IUCN, 1993
- Environmental Protection Act, 1997 and Environment Protection Rules, 1997
- World Bank Safeguards Policies
- Standards for ambient Air Quality, Water Quality, emissions, effluents, etc (GoN as well as EHS Guidelines of the World Bank Group)etc
- Solid Waste Management Act 2011
- Forest Act 1993 and Forest Regulations 1995
- Any other related Acts/Regulations/Guidelines

Annex 1: Generic Table of Content of ESMP

1. Executive Summary both in English and Nepali
2. Introduction
3. Subproject description and Relevancy of preparing ESMP
4. Environmental and Social Baseline
5. Environmental and Social Impacts
 - a. Beneficial Impacts
 - i. Construction Phase
 - ii. Operation Phase
 - b. Adverse Impacts
 - i. Construction Phase
 - ii. Operation Phase
6. Mitigation Measures including Alternatives (summarize in matrix Form): shall include respective mitigation measures of impacts, time of action, mitigation cost and responsibility. These, inter alia, include (i) Alternatives - alternative measures for avoiding, minimizing, controlling adverse impacts (or for enhancing beneficial impacts); (ii) Mitigation -site-specific, cost effective and detailed measures for each impact that will reduce the identified adverse impact to acceptable levels; (iii) Capacity Development and Training/ awareness - specific and targeted training / awareness/ capacity building, if necessary (targeted to, for example, subproject staff, contractors, and community groups); (iv) Implementation Schedule and Cost Estimates - For all mitigation and capacity development, the ESMP provides (a) an implementation schedule for measures that must be carried as a part of the subproject, and (b) cost estimates for implementing the ESMP.
7. Monitoring Plan (In matrix Form): shall prescribe monitoring plan with indicators, methods (laboratory test, visual observation, interview etc.), frequency and time of action, location, responsibility and monitoring cost.
8. Conclusions and Recommendations

Annex 2a: Format of Environmental and Social Mitigation Matrix

S.N.	Environmental Impacts	Mitigation Measures	Time of Action	Mitigation Cost (NRs.)	Responsibility
1.0 Construction Phase					
1.1					
1.2					
1.3					
1.4					
2.0 Operation Phase					
2.1					
2.2					
2.3					
2.4					

S.N.	Social Impacts	Mitigation Measures	Time of Action	Mitigation Cost (NRs.)	Responsibility
1.0 Construction Phase					
1.1					
1.2					
1.3					
1.4					
2.0 Operation Phase					
2.1					
2.2					
2.3					
2.4					

Annex 2b: Format of Environmental Monitoring Matrix

S. N.	Indicators	Methods	Frequency/ Time	Location	Responsibility	Monitoring Cost (NRs.)
1.0 Construction Phase						
1.1						
1.2						
2.0 Operation Phase						
1.1						
1.2						
1.3						