

***THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
ENVIRONMENTL PROTECTION AUTHORITY***



***GUIDELINE FOR THE PREPARATION OF ENVIRONMENTAL
MANAGEMENT PLAN***

NOT FOR CITATION

This guidelines is still under development and shall be binding after consensus is reached between the Environmental Protection Authority and the Environmental Units of Competent Sectoral Agencies

General Guideline for the precaution of Environmental management explanation

Scope of EMP

EMP is a document which sets forth those practice which will be implemented to prevent, control and mitigate significant negative environmental impacts arising as a consequences of a proposed socio-economic activity.

Under such a definition, the environmental management practice consist of four categories of activities, namely.

- a environmental management aimed at avoiding or preventing negative impacts through the selection of an alternative site layout and project design.
- b environmental management directed at mitigating minimizing or controlling negative impacts whether arising during the operation phase, or after completion (for example, project site rehabilitation)
- c environmental management in terms of enhancing the positive impacts so that the activity may yield greater benefits both to the proponent and others, particularly the public which shares in the benefits of those positive impacts

- d environmental management in terms of providing an environmental economic basis for compensation (whether socio-economic or ecological) for irrecoverable, lost or damaged resources resulting from the project or activity.

Depth of the EMP

In view of the fact that the EMP documents form part of the feasibility study, the EMP document shall only provide the basic direction, principles or requirements for the prevention/ mitigation / control of impacts. whenever deemed necessary, it may specify the extent to which the projects or activity is considered reasonable or feasible to undertake, viewed from the technical, economic and ecological aspects before more investment, energy and time are spent. The limitation of data or information will certainly influence the type of management activities to be described in the EMP document.

The basic direction, principles or requirements for environmental management, as stated in the EMP document, will subsequently be integrated with or become considerations for the nearer to painters or researches or consultants in compiling the detailed design of the activity.

In addition, it is also important to remember that the EMP must be rated to the environmental impact statement, in the sense that the environmental components to be managed are only those which may experience fundamental changed as determined in the environmental impact statement document.

Environmental Management plan (EMP) The EMP may take the form of prevention and mitigation of negative impacts as well as the enhancement of positive impacts. In EMP must be presented clearly and systematically, and contain those primary features as follows:

- a The EMP shall set forth the basic direction, principles and guidelines or requirements to prevent, mitigate, control or enhance the significant impacts, whether positive or negative. Wherever needed, it shall include references prefacing to the design of mitigation of the relevant impacts.
- b The EMP must be formulated in such a way that it may function as a consideration in the preparation of the detailed design or road-map and as the basis for implementing environmental management.
- c The EMP must also include those practices which will increase the knowledge and capability in environmental management by the employees of the proponent of those who actually get on the implementation process.
- d The EMP shall also include the establishment of a unit in the organization or association responsible for environment, which would implement the EMP those aspects necessary for specification in this regard include the organizational structure, scope of tasks and authority of the unit, as well as the number and qualifications of its personnel.

Environmental Management approach

To deal with the significant impacts predicted in the environmental impact statement, one or more environmental approach may be used, whether technological, socio-economic or institutional

- a.1 in terms of controlling waste, methods which may be used include:
 - a.1.1 limitation or isolation of the wastes
 - a.1.2 recycling of the wastes
 - a.1.3 rendering wastes harmless to people and other living organisms

a.2 In terms of preventing, reducing or rehabilitating damaged natural resources, method can include

a.2.1 building terrace or planting land covers to prevent erosion,

a.2.2 reclaiming land formerly mined, by redistributing the top soil and planning land covers;

a.3 Enhancement of the positive impacts through increasing their value can be achieved through the improvement of the positive impacts and increasing their efficiency.

b Socio-economic Approach

This approach can include those steps to be taken by the proponent to control the significant impacts through socially and economically motivated actions for Example:

b.1 involving the community in the vicinity of the proposed activity in active participation on environmental management activities.

b.2 requesting assistance from the government in mitigating the significant environmental impacts, in cases of limited capabilities of the proponent.

b.3 application for elimination of import during for pollution control equipment

b.4 giving propriety in employment to local workers, in accordance with their skills and capabilities.

b.5 paying compensation for public land needed for the proposed activity under the principle of mutual benefits.

- b.6 providing general support facilities to the community in the vicinity of the proposed business or activity, in accordance with the capabilities of the proponent.
- b.7 building harmonious social interactions with the surrounding community in order to prevent social jealousy.

c Institutional Approach

This approach includes the institutional mechanisms to be adopted by the proponent in controlling significant environmental impacts for example:

- c.1 cooperating with competent and relevant agencies for environmental management.
- c.2 supervising the environmental management performance of the authorities.
- c.3 periodic reporting to relevant parties on the results of environmental management

Format of the Document

Since EMP document is prepared in conjunction with the environmental impact statement and environmental monitoring plan, and all three will be evaluated together, the EMP document format shall directly correspond to the four main principle of environmental management.

II Composition of the EMP document

- II. 1 Environmental management background.

- 1.a statement regarding the background of the need to undertake environmental management viewed from the interest of the proponent, from relevant parties as well as the wider interest within the framework of supporting development programme.
- 1.b Systematic, brief and clear description of the objectives of the environmental management to be undertaken by the proponent relating to the proposed activity.
- 1.c description of the benefits of undertaking good environmental management, for the proponent, for relevant parties as well as for the public also large
- 1.d brief description of the area, community groups or ecosystem in the vicinity of the proposed activity which are sensitive to change arising from the existence of the activity based on the result of the environmental impact statement report.
- 1.e maps which clearly indicate information pertaining to:
 - 1.e.a geographical location of the activity
 - 1.e.b river, lakes, swamps
 - 1.e.c road network and settlements
 - 1.e.d administrative boundaries of the local government
 - 1.e.e the areas, community groups or ecosystems in and around the site of proposed activity which are sensitive to change

II.2 Environmental Management Plan

A brief but clear description of each type of impact caused by one or more activities, under the following order of discussion.

A brief and clear explanation of the environmental components or parameters predicted to experience fundamental change, pursuant to the EIS results. It must be stressed that the

description should only involve those environmental components or parameters which are affected by significant impacts. A brief explanation should be provided the extent of development of the proposed activity at the time EA is being compiled (feasibility study, detailed design or operation phase)

environmental components or parameters, which may experience fundamental changes as predicted by the EIA would need to be examined. For that purpose, some of the strategic points for management should be based on the following considerations.

- a.1 The significant impacts which we to be particularly concern those environmental components that, according to the scoping process (within the framework for preparation of the TOR of the EIS), form the main issue for the proposed activity.
- a.2 The significant impacts to be managed are those classified as producing many indirect significant impacts secondary, tertiary, etc.)
- a.3 The significant impacts to be managed shall be those impacts when prevented or mitigated will lead to subsequent effects on the indirect significant impacts. In addition, state those indirect significant impacts which will be affected as a consequence of the management of the strategically significant impacts

B Impact source

State briefly the source of the significant impacts.

- b.1 If the significant impacts arises as a direct result of the activity, describe briefly the type of activity which causes the significant impact
- b.2 If the significant impact appears as a result of the change in other environmental component, describe briefly those environmental components which cause the important impact

2. Impact criteria

Describe the impact criteria that will be used to measure the environmental component =s affected by the proposed activity, in high of the quality standard (as stipulated by law) and scientifically acceptable expert opinion, which are commonly practiced and/ or stipulated by the responsible government agencies. The criteria stated shall be those used in the EIS document.

3. Objective of the EMP

Specify and describe the objective of managing the strategically significant impacts as well as the indirect impacts which will be consequently prevent mitigated/controlled for example, the strategic impact to be managed in proposed pulp and paper plant is the quality of wastewater, and the specific objectives of the environmental management practices are “To control the quality of the wastewater discharged into the WXYZ River, particularly Bods, COD, total suspended solid and ph, to ensure that they do not exceed the wastewater quality standards as stipulated in ISO standards regarding wastewater quality standards for existing operations.

4. Environmental Management

Describe in detail those environmental management practices which can be carried out through the technological, socio-economic and /or institutional approaches as explained in section x party here in (general explanation)

5 Environmental sit management

state the planned location of any environmental management activities with due attention to the distribution of the significant impacts to be managed. As far as possible, provide maps/sketcher/ drawings.

6. Duration of Environmental Management

Briefly describe when and how long the environmental management activities will be carried out, with due attention to the nature of the significant impacts to be managed (duration, cumulative nature, reversibility or irreversibility) and the capability of the proponent (in terms of personnel fund equipment).

7 Environmental Management finding

The finding for the implementation of the EMP shall be the task and responsibility of the proponent can carried. the finding will, among others, include.

- 7.a investment costs such as the cost for the purchases of environmental management equipment and the cost of other technical activities
- 7.b personnel and operating costs.
- 7.c Costs for education and operational skill training

8 Environmental Management institutions

For every proposed environmental management practice, list the agency or institution tasked with, involved in and related to that environmental management activity pursuant to the prevailing laws, national or regional.

The environmental management institutions to be listed include.

- 8.1 Excluding agencies for environmental management Name those excluding agencies which are responsible for implementing and paying for the environmental management activity. If in implementing the environmental management activities the proponent will delegate to or cooperate with any other party, name that party.

8.2 Environmental Management supervisory Bode, list those which will serve in a supervisory role in the implantation of the EMP. There may be one or more agencies involved in supervision, depending on the scope of authority and responsibility and also the prevailing laws.

8.3 Environmental Management Reporting

List agencies to be periodically reported to regarding the result of the environmental management activities, in accordance with the scope of the prevailing laws and the responsibilities of the agencies concerned.

III Bibliography

In the section list the source of data and information used in the preparation of the EMP, whether in the form of books, magazines, essays or survey reports: The literature is to be listed in accordance with standard bibliographic procedure.

IV Appendices

This section should include

- a. A summary of the document in the form of a table with the following column titles: Type of environmental impact, objective of environmental management, Duration of Environmental Management and Environmental Management Agencies.
- b. Important data and information supporting the EMP document which results from the EIS document, such as maps (of activity locations, environmental monitoring sites ,etc) as well as primary data concerning the proposed environmental management practices