

# **GUIDANCE DOCUMENT FOR PREPARATION AND SUBMISSION OF ENVIRONMENTAL MANAGEMENT PLAN (EMP)**

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## **A. THE GUIDANCE DOCUMENT**

### **1.0 INTRODUCTION TO GUIDANCE DOCUMENT**

Environmental Management Plan (EMP) translates the EIA approval conditions into action. The EMP is neither a report of another study nor a document which is descriptive in character. As a contrast, the EMP document states in explicit terms what actions will be taken, what measures will be instituted, what structures will be built, what will be installed, when the actions will be executed; etc. in order for the project activities to be compliant with the EIA approval conditions. The EMP is a concrete plan of action which is explicit, illustrative, action-oriented, time-bound and definitive. Eventhough the EMP exhibits all of the above characteristics, the EMP is by nature, a living document which needs to be revised and updated when there exists certain circumstances which demand changes to be made. These factors may include changes to project details and surrounding areas and inadequacy of the control measures to comply with regulatory standards.

### **2.0 OBJECTIVE OF GUIDANCE DOCUMENT**

The objective of the Guidance Document is to:

Provide general guidance to consultants in the preparation of EMPs to be submitted to the DOE for approval. Pertinent aspects to be incorporated in the document are stipulated to ensure that the EIA approval conditions are translated into actionable items.

### 3.0 HOW TO GET STARTED

Firstly the project proponent and the consultant who has been tasked to prepare the EMP should study and understand each of the EIA approval conditions.

Secondly, for each of the approval conditions, whether they are administrative or physical in nature, identify actions required to be executed in order to comply with them.

Thirdly, compute an estimated cost to be incurred for each of the executable actions.

Fourthly, the project proponent needs to be thoroughly briefed on the executable actions to be undertaken and the cost implication. Later, the proponent also needs to make a declaration that all the actions stipulated in the EMP will be implemented (see paragraph C 1.0).

The logical steps to be followed in the EMP preparation as outlined above are depicted in Figure 1.

Step:

Action by:

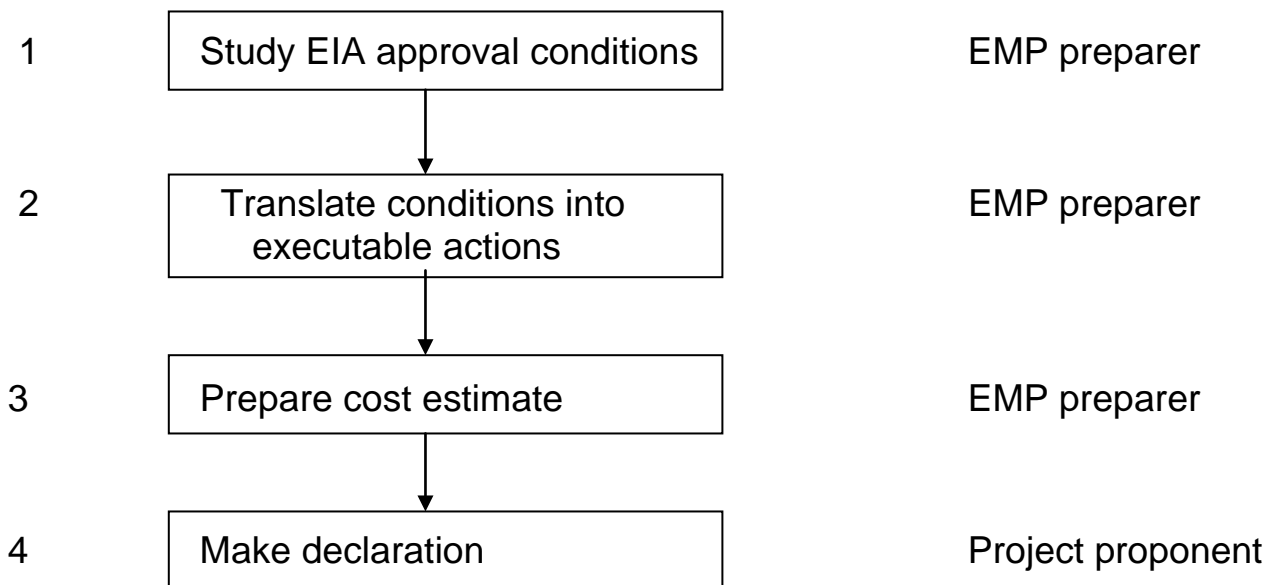


Figure 1: Typical steps in EMP Preparation

## **B. THE ENVIRONMENTAL MANAGEMENT PLAN (EMP)**

The EMP shall at the minimum, contain the following chapters: chapter 1 to chapter 5. However, the depth of treatment and details discussed in chapter 5 shall be tailored to suit the individual project and the EIA approval conditions.

### **1.0 INTRODUCTION**

- a. Project layout as approved in the Development Order by Local Authority.
- b. Project implementation schedule.
- c. Name of the EMP preparer and his consulting firm.

### **2.0 POLICY**

- a. Company's corporate policy statement on environmental management and protection.

### **3.0 ORGANIZATIONAL STRUCTURE**

- a. Organization chart of the company's top management with responsibilities on environmental management and protection (provide names, positions, mobile phone contact numbers and e-mail addresses).
- b. Name, mobile phone contact number and e-mail address of environmental manager, engineering consultant, contractor, site supervisor and industrial effluent treatment system (IETS)/air pollution control (APC) competent person (wherever relevant and available).

- c. Name of environmental consultant and accredited laboratory conducting environmental monitoring, analysis of environmental samples and submitting reports to DOE.

#### **4.0 TRAINING REQUIREMENT**

- a. Plan for staff training in order to develop competency to discharge responsibilities on environmental requirements and compliance.

#### **5.0 ENVIRONMENTAL REQUIREMENTS**

- a. EIA Approval Conditions.
- b. Table of “Mitigating Measures to be Implemented” as in the Appendix I.

##### **5.1 IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL**

- a. Name and contact (mobile phone number, e-mail address) of professional who is CPESC certified,\* preparing the ESCP that would comply with the Guidance Document on ESCP preparation issued by the DOE.
- b. Schedule of project phasing and submission of ESCP.

Schedule of project phasing, ESCP preparation and submission and pre construction meeting to be attended by project proponent/management, ESCP design engineer, contractor and DOE officer.

(\*Note: As an interim measure, an equivalent certification may be accepted. The non-CPESC certified professional must submit certified evidence to the DOE and obtain DOE’s consent before undertaking any assignment on ESCP preparation).

(c) Method Statement

Method statement and layout plan to be implemented for the major activities of the project that may cause erosion and sedimentation.

5.2 WATER POLLUTION CONTROL

a. Ambient monitoring

Detailed environmental monitoring program inclusive of map indicating location, longitude, latitude, frequency, parameters, equipment, personnel and schedule.

b. Effluent treatment

Proposed treatment technology; schedule for submission of Notification for new source of effluent discharge, design of IETS, recruitment of competent person and purchase of relevant equipment.

c. Temporary sullage and sewage treatment

Detailed proposal for management and treatment of sullage and provision of temporary sewage facilities for workers.

d. Permanent sullage and sewage treatment

Proposed treatment technology; schedule for submission of Notification for new source of sewage discharge, design of sewage treatment system (STS), recruitment of competent person and purchase of relevant equipment.

### 5.3 CONTROL OF AIR POLLUTION AND NOISE

#### a. Ambient monitoring

Detailed environmental monitoring program inclusive of map indicating location, longitude latitude, frequency, parameters, equipment, personnel and schedule.

#### b. Air pollution control

Proposed control technology; list of equipment requiring approval from DOE; schedule for submission of application for air pollution control system (APCS) Written Approvals, recruitment of competent person and purchase of relevant equipment.

### 5.4 MATERIALS AND WASTE MANAGEMENT

#### a. Raw materials and stockpiles.

Detailed proposal for management of raw materials, including chemicals, fuels, etc., and stockpiles.

#### b. Solid waste.

Detailed proposal for management of solid waste during earthwork and construction phase.

#### c. Scheduled waste.

Detailed proposal for management of scheduled waste to comply with Environmental Quality (Scheduled Waste) Regulations 2005.

#### d. Biomass.

Detailed proposal for management of biomass during land clearing and construction phase.

- e. Spoils/dredge materials/construction waste.

Detailed proposal for management of spoils/ dredge materials/ construction waste during earthwork and construction phase.

- f. Open burning.

Measures to prevent occurrence of open burning.

- g. Housekeeping.

Proposal for implementing best practices in general housekeeping including housekeeping of the vehicles and machinery maintenance area.

## 5.5 EMERGENCY RESPONSE PLAN (ERP)

Name and contact (mobile phone number, e-mail address) of professional who will prepare the ERP and the schedule for its preparation and submission to the DOE.

# **C. DECLARATION AND CHECKLIST**

## **1.0 DECLARATION**

The project proponent is required to make a declaration that all the actions/measures/plans outlined in the EMP will be implemented by using the format in Appendix II.

## **2.0 CHECKLIST**

To assist the consultant who has been assigned to prepare the EMP and submit it to the DOE, a checklist/form (Appendix III) has been prepared. The form is required to be filled out and submitted to the DOE together with the EMP document.

Department of Environment (Headquarters)  
Putrajaya

December 28, 2010



## MITIGATION MEASURES TO BE IMPLEMENTED

Table: Mitigation Measures to be Implemented

Project activities and environmental issues concerned	Impacts	Mitigation measures recommended in EIA	Mitigations measures to be implemented
*	*	*	

- Note: The contents of the above Table are to be derived from Table I: “Summary of Impacts and Mitigation Measures” presented in the EIA report and additional requirements stipulated in the EIA approval conditions.

**DECLARATION BY PROJECT PROPONENT/AUTHORIZED PERSON**

I certify that the Environmental Management Plan has been prepared with my knowledge and I shall undertake the responsibility to ensure the actions/measures/plans stated in the EMP will be implemented.

PROJECT TITLE: .....  
.....  
.....

PROJECT ADDRESS/LOCATION: .....  
.....  
.....

.....  
Name of project proponent/authorized person

Signature: (.....)

Date: .....

**ENVIRONMENTAL MANAGEMENT PLAN PREPARATION CHECKLIST**

PROJECT TITLE: \_\_\_\_\_

NAME OF PROJECT PROPONENT: \_\_\_\_\_

NAME OF CONSULTANT: \_\_\_\_\_

**EIA APPROVAL CONDITIONS COMPLIANCE CHECKLIST**

<b>EIA APPROVAL CONDITION, NUMBER....</b>	<b>ACTIONABLE ITEM IN EMP ON PAGE.....</b>	<b>NOTES</b>

Name of project proponent/authorized person

.....

Signature: (.....)

Date: .....