

1.0 Purpose

This instruction describes how to prepare and implement a Project Environmental Management Plan (EMP) to control environmental aspects during the course of construction.

2.0 Scope

The requirements of EMP shall be applicable to building and civil engineering projects excluding term contracts with duration of 6 months or less. EMP describes the necessary overall roles, responsibilities, control, inspection and monitoring requirement to ensure the environmental requirements for project is fulfilled. The control is performed from project construction commencement to completion.

3.0 Procedure

- 3.1 If a contract specifies EMP with specified format is required by the client, WBC shall prepare the EMP according to the contract requirements and relevant documents supplied by client, such as EIA report, Environmental Monitoring & Audit Manual, project method statement and other relevant information provided by client.
- 3.2 If there is no specified format for the EMP from the client, WBC shall prepare the EMP according to the company guidelines as shown in Appendix 1 of this Instruction, which is provided for the purpose of reference. Project Manager shall determine the most suitable contents for the EMP based on the company guidelines and contractual requirements, whereas the stricter requirement shall be followed.
- 3.3 If an independent third party / sub-contractor is employed to prepare the EMP, related documents such as Best Practices for Construction Activities (EI-04) and List of Significant Aspects shall be provided to the sub-contractor for reference purpose.

4.0 Monitoring and Checking

Project Manager shall responsible for the adequacy and suitability of the EMP and update it as necessary. Project Environmental Officer/Engineer shall maintain and follow the requirements of EMP to perform environmental performance inspection or other monitoring programmes.

5.0 Records

Record Description	Record Location / Retention Responsibility	Minimum Retention Time
Environmental Management Plan (EMP)	Project Manager	3 years after the date of completion of project

6.0 Appendix

Appendix 1 : Environmental Management Plan (EF-EI01-01)

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Add suitable sections as necessary

Appendix A List of Sensitive Receivers

Appendix B Site Maps

Add suitable appendices as necessary

Distribution

Copy No.

[Project Manager]

[Project Environmental Officer]

[Others]

1.0 Background

1.1 Project Description

[Provide brief description of the project and any cross reference to any other Environmental Management Plans / client's documents]

1.2 Requirements for an Environmental Management Plan (EMP)

[Briefly describe the requirements for an EMP in this project with the list of the relevant documents, such as client's documents (e.g. Environmental Impact Assessment Report), and environmental permit(s), etc.]

1.3 Objectives of the EMP

[Highlight the purposes of adopting this EMP for this specific project and provide brief descriptions on the different objectives / contents of this EMP.]

This EMP sets out in detail the approach which WBC will adopt in dealing with the potential environmental impacts from various different construction activities throughout the construction of the Contracts. It provides systematic procedures for minimising environmental impacts from that may arise from the construction work.

The main objectives of the EMP are to:

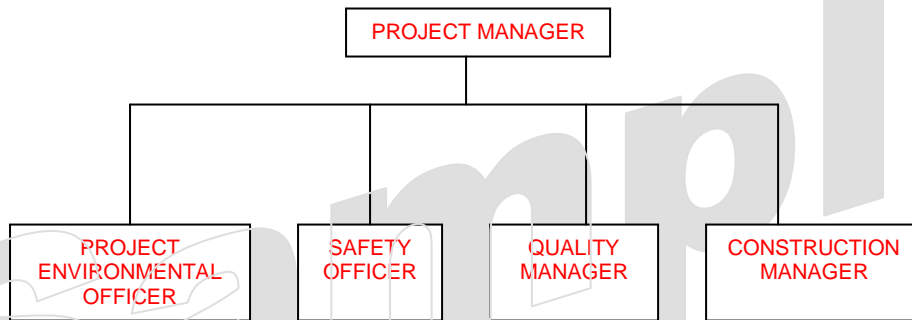
- 4.1 Make reference to statutory environmental requirements and obligations;
- 4.2 Clarify responsibilities of various parties involved;
- 4.3 Address all potential significant environmental impacts;
- 4.4 Set out environmental management approach;
- 4.5 Initiate and implement mitigation measures;
- 4.6 Set out housekeeping practices; and
- 4.7 Set out emergency procedures.

2.0 Policy Statement

[Insert the Company's Environmental Policy in this section. Otherwise, if necessary, provide a specific environmental policy for this project.]

3.0 Organisation Structure and Responsibilities

3.1 [Site Organisation Diagram]



3.2 [Environmental Team Structure]

[Provide organisation structure of Project Environmental Team, briefly describe roles and environmental responsibilities of project key staff.]

4.0 Promoting Environmental Awareness

[Provide brief description on the procedures (e.g. staff training sessions / briefings, availability of relevant documents, communication channels) will be taken to ensure all concerned site staff including subcontractors are aware of the environmental requirements under relevant environmental legislation and permit(s), and contract specifications.]

The Company will provide key site staff and staff of subcontractors, at the level of supervisor and above, with copies of relevant environmental documents, which include but not limited to the followings:

- *Environmental Policy*
- *Environmental Management Plan*
- *.....*

4.1 Reporting and Communication Procedures

[Provide description on the means of environmental communications, which should include both internal and external communications, ways to collect, report and respond to environmental enquiries, complaints and client's feedback, and ways to disseminate environmental information. For detail can refer to EP-07 Enquiry / Complaint / Nonconformity Handling]

Means	Frequency	Purpose/Action	Responsible Party
<i>Site Environmental Log Book</i>	<i>Continually</i>	<i>Written record of what has been observed and done related to environmental issues, including implementation status of mitigation measures.</i>	<i>PEO</i>
<i>Site meeting</i>	<i>Monthly</i>	<i>Face-to-face communications between construction and client.</i>	<i>PEO</i>
<i>Environmental briefing / training session</i>	<i>Quarterly</i>	<i>Briefing or Training on environmental issues to key site staff and staff of subcontractors.</i>	<i>PEO</i>
<i>Environmental Complaint Log</i>	<i>When necessary</i>	<i>To handle and respond environmental complaints.</i>	<i>PEO</i>

5.0 List of Legal and Other Requirements

[Refer to the Company's Legal Register and Other Requirements (may use it directly or list the applicable environmental regulations or requirements). If additional environmental legislations are identified, it shall inform EMR to update the Legal Register.]

1. Noise
2. Water
3. Air
4. Waste
5. Handling and Storage of Chemicals and Dangerous Goods
6. Resources Utilisation
7. Protection of Flora, Fauna
8. Protection of Historical Heritage
9. Environmental Impact Assessment and Environmental Monitoring and Auditing
10. Building Planning
11. Others

6.0 List of Significant Environmental Aspects

[Refer to the Company's List of Significant Environmental Aspects, follow the instructions from EP-01 and prepare the List of Significant Environmental Aspects for this project and attach the list here. If additional significant environmental aspects are identified, it shall inform EMR to update the Register of Environmental Aspects and List of Significant Environmental Aspects.]

7.0 Environmental Control Procedures and Mitigation Measures

[Describe the environmental control procedures and mitigation measures to minimise the impacts of significant environmental aspects based on EI-04 Best Practices for Construction. If additional environmental control procedures and mitigation measures are required for this project, it shall be included; otherwise, it may use EI-04 directly.]

- A. Air*
- B. Water*
- C. Noise*
- D. Waste*
- E. Handling and Storage of Chemicals and Dangerous Goods*
- F. Protection of Flora, Fauna and Historical Heritage*
- G. Resource Conservation*

8.0 Environmental Emergency Procedures

[Provide a brief description on the potential accidents and emergency situations, and identify the subsequent contingency procedures and plan. It shall refer to EI-04 Section H, which sets out instructions for Potential Accidents and Emergency Situations.]

9.0 Environmental Inspection, Monitoring, Auditing and Corrective Actions

[Based on EI-04 Best Practices for Construction, describe the procedures and requirements of environmental inspection, monitoring, auditing and corrective actions. The environmental monitoring and auditing program should include frequency, monitoring criteria, method, sampling and testing requirements, and use of checklist.]

10.0 Environmental Records

[Please refer to EI-04 Best Practices for Construction for list of environmental records.]

Category	Environmental Record	Responsible Personnel	Retention
<i>General</i>	<i>Site inspection records Internal audit results Environmental monitoring data record sheets</i>	<i>Project Manager</i>	<i>1 year after project completion</i>
<i>Air Pollution</i>			
<i>Noise Control</i>			
<i>Water Quality</i>			

Appendix A List of Sensitive Receivers

[List the name and figures of environmental sensitive receivers. The figure should indicate the locations of these environmental sensitive receivers.]

Air Sensitive Receivers No.	Fig. No.	Description	Air Sensitive Receivers	Horizontal Distance to Worksite (m)
1	1.1	ABC Estate	x	50

Noise Sensitive Receivers No.	Fig. No.	Description	Noise Sensitive Receivers	Horizontal Distance to Worksite (m)

Water Sensitive Receivers No.	Fig. No.	Description	Water Sensitive Receivers (Stream, River and Sea)	Horizontal Distance to Worksite (m)

Appendix B Site Maps

[Insert a detail project site map. The map should indicate the locations of sensitive receivers and also the locations of environmental pollution facilities (e.g. wastewater treatment system, wheel washing facilities) at different stages.]