

1.0 Purpose

This procedure describes the method for identifying and evaluating environmental aspects related to the **design and construction of building and civil engineering works** carried out by **WBC** respectively and determining the significance of these aspects. The procedure also applies to those indirect aspects arising from works carried out by **WBC's** suppliers and contractors.

2.0 Scope

This procedure applies to all operations and activities, under normal conditions and reasonably foreseeable situations, in the **office, project sites** and **facilities** of **WBC**.

3.0 Reference Documents

Section 4.3.1, EMS Manual

EAR-01	Register of Environmental Aspects
LR-01	Register of Legal and Other Requirements
EP-02	Review of Legal and Other Requirements
EP-04	Control of Documents
EP-08	Control of Records

4.0 Definitions

EMS Committee	– Environmental Management System Committee
EMR	– Environmental Management Representative
SEA	– Significant Environmental Aspects

5.0 Responsibility

5.1 EMS Committee

The EMS Committee shall identify environmental aspects of all activities, products and services of **WBC** and its suppliers and contractors, and evaluate the significance of the environmental aspects.

The members of EMS Committee / EMR shall prepare and maintain the Register of Environmental Aspects such that it contains the most up-to-date information.

5.2 General Manager

The **General Manager** shall review and approve the Register of Environmental Aspects.

6.0 Procedure

6.1 Basis for Aspect Identification

Environmental aspects are arising from the **WBC's** activities, products and services; and include indirect aspects that can be influenced, such arising from sub-contractor activities carried out in the construction sites.

Aspects within the defined scope of the EMS with regard to resources input to every process /activity, the intermediate effects, and the outputs for past, present and future activities, under normal operating conditions and any reasonable foreseeable or emergent situations shall be considered e.g. planned or new developments, or new or modified activities, products and services.

6.2 Identification of Environmental Aspects

The environmental aspects of **WBC** shall be identified with respect to its major work activities. The aspects identified from **design and construction of building and civil engineering works and office activities (both Head Office and Site Offices)** are consolidated to form the Register of Environmental Aspects.

Information reviewed for aspect identification shall include but is not limited to the following:

- Work process flow and procedures
- Legal requirements / non-statutory guidance notes
- General specifications and Particular specifications;
- Design reports
- Observations in site inspections;
- Records of complaints and/or non-compliance;
- Past monitoring records; and
- Records for past management reviews and/or environmental audits.

6.3 Identification of Environmental Impacts of Aspects

The environmental impacts of each aspect shall be identified with regards to:

- Resources utilisation (including use of raw materials, energy, etc);
- Waste management;
- Air emissions;
- Water pollution;
- Noise and vibration nuisance;
- Land contamination;
- Indirect impacts caused by **WBC's** suppliers or contractors or customers; and
- Others : Flora and Fauna, Visual impact; Community impact, Transportation impact, Nuisance, Site Security, etc.

6.4 Significance Evaluation of Environmental Aspects

The environmental aspects shall be evaluated for their significance according to the four criteria listed in Table 1 one by one. A score of “1” or “0” will be assigned. If an environmental aspect scores “1” for a criterion, it is considered as a significant environmental aspect (SEA) and evaluation against the remaining criteria is not necessary (denoted by “-“ in the Register of Environmental Aspects). If an environmental aspect scores “0” for a criterion, it shall be evaluated by the remaining criteria one by one. If an environmental aspect scores “0” for all 4 criteria, it is regarded as insignificant. (Flow chart shown in Appendix 1)

Significant Environmental Aspects shall be taken into account in establishing, implementing and maintaining the EMS, they shall be managed by operational control procedures or by establishing improvement objectives and targets.

Table 1 - Score assignment for evaluation criteria

Evaluation criteria	Conditions	Score
Legal requirement	The aspect is legally and contract regulated.	1
	The aspect is regulated by other requirements.	1
	The aspect is not legally regulated.	0
Environmental consequence	Expected release of pollutants of severe environmental consequence	1
	Unexpected situation such as emergency may cause uncontrolled release of pollutants, or serious damage to flora, fauna or historical heritage.	1
	The aspect does not have potential environmental impacts of severe consequence.	0
Use of materials	Large consumption of materials with significant potential to reduce, reuse and recycle.	1
	Consumption of materials that are hazardous in nature and can be replaced by more environmentally benign alternatives.	1
	Consumption of materials that originate from environmentally sensitive sources.	1
	Consumption of materials that have little or no potential for reduce, reuse, recycling, replacement, and are not from environmentally sensitive sources.	0
Corporate concerns	WBC has received valid, justifiable complaints for similar situations previously.	1
	The aspect concerns suppliers or contractors' activities and can potentially be influenced by WBC.	1
	The aspect is about selection of suppliers or contractors	1

Identification of Environmental Aspects and Significance Evaluation

	The aspect is a corporate concern reflected in the corporate policy	1
	None of above	0

6.5 Development and Updating of the Register of Environmental Aspects

6.5.1 Register of Environmental Aspects – for Corporate Level

The EMS Committee shall identify WBC's environmental aspects and evaluate their significance through the following steps 6.1 to 6.4. The result shown in the Environmental Aspect Register – for Corporate Level, which shall be reviewed regularly for development and updated if necessary.

- a. The information provided for each aspect shall include:
 - Process /activity where the aspect is identified;
 - Brief description of the aspect;
 - Environmental impacts expected to result from the aspect;
 - Score of the aspects based on the evaluation criteria;
 - Control mechanism for each significant environmental aspect. (e.g. Environmental Practice Instruction /System Procedure /objective /target)
- b. New revision of Environmental Aspect Register – for Corporate Level shall be updated,
 - Whenever planned or new development, or new or modified activities /products /services are introduced by the Company or its contractors.
 - New environmental aspects are identified.

6.5.2 Register of Environmental Aspects – for Project

Based on the Register of Environmental Aspects, the Project Manager shall prepare the List of Significant Environmental Aspects (List of SEA), which shall be extracted from the Register of Environmental Aspects – for Corporate Level for relevant SEA at different stages (i.e. design, material / equipment specification, contractor / supplier selection, construction, etc) for each individual project. Environmental aspects that are identified as not significant shall not be listed on the List of SEA to avoid confusion.

Throughout the Project, Project Manager shall ensure the List of SEA covers all relevant SEA. Should additional SEA are identified, the EMR shall be notified to update the Register of EA for Corporate Level also.

The List of SEA for each Project shall be retained by the Project Manager as reference to ensure that all the SEA of that project are under control according to relevant control measures.

7.0 Records

Record Description	Record Location/ Retention Responsibility	Minimum Retention Time
Register of Environmental	EMR keeps the Master	Two previous version

Identification of Environmental Aspects and Significance Evaluation

Aspects (EAR-01)	Copy	
List of SEA for project	PM	Two previous version

8.0 Appendix

Appendix 1 – Flow chart of significance evaluation of environmental aspects

Appendix 1: Workflow of Aspect Identification and Evaluation

