

Construction Environmental Management

Aim of the Credit

To reward projects that use best practice formal environmental management procedures during construction.

Credit Criteria

0	Environmental Management Plan	A comprehensive project-specific Environmental Management Plan (EMP) in place for construction works is a minimum requirement for this credit. In order to achieve any points in this credit, this criterion must be achieved.
1	Formalised Management System: Auditing	1 point is awarded where credit criteria 0 is awarded and a systematic and methodical approach to planning, implementing and auditing is in place during construction to ensure conformance with the EMP.
2	Third-party certification of Management System	1 additional point is awarded where credit criterion 1 is achieved and the formalised environmental management system used to plan, implement and audit the EMP is certified by a recognised third-party organisation.

Compliance Requirements

0 - Environmental Management Plan (EMP)

A project-specific EMP must be developed and implemented, in accordance with its Environmental Management System where in place, to assist the Principal/Head Contractor and its service providers in managing environmental performance and conformity with the environmental conditions arising from excavation, demolition and construction.

An EMP that is compliant with best practice guidelines must be implemented from the beginning of construction works, including any excavation and demolition.

The requirements for EMPs, as outlined within the latest NSW Environmental Management Systems Guidelines, are considered best practice guidelines for the purposes of this credit. At the time of release of this credit, the latest edition of the guidelines was the 3rd Edition, dated September 2013. It is the responsibility of the project team to verify the latest editions of the guidelines are used at the time of construction.

The EMP must cover environmental impacts arising from construction works, and it must be site-specific.

Where multiple buildings are seeking a single certified rating, an EMP for the entire project site area, is an acceptable way to demonstrate compliance with this criterion.

The scope of an EMP will vary, depending on the nature of the environmental impacts. However, best practice EMPs must include:

All projects:

- a. Commitment and policy
 - Objectives of the EMP related to the Principal/Head Contractor's environmental policy and associated top management commitment.
- b. Planning
 - Identification of the environmental aspects and significant related impacts associated with the work.
- c. Implementation
 - Documented procedures to be followed to manage the aspects and significant impacts, risks and opportunities identified, in accordance with the requirements of the responsible agency and the contract involved
- d. Contact Information
 - A clear outline of the environmental management roles and responsibilities of the Principal/Head Contractor and its service providers, covering contact details required
 - Emergency response procedures, covering the contact details required
- e. Monitoring, evaluation and review
 - Monitoring, measurement, evaluation and review, including audit procedures
 - Provisions for review of plan and procedures, addressing the consequences of nonconformities
 - Corrective and preventive actions and follow-up verification

Projects with contract value higher than \$10 Million:

In addition to the requirements above for 'All projects' requirements), the following requirements must also be included under 'Implementation' for projects with a contract value higher than \$10 Million:

- c. Implementation:
 - Identification of organisational and individual roles, responsibilities and authorities for establishing, implementing and maintaining procedures to ensure conformity with each environmental management requirement
 - Identification of organisational and individual roles, responsibilities and authorities for monitoring activities and performance to suit each environmental management requirement
 - Further documented procedures, with roles, responsibilities and authorities, for controlling all processes and performance, to suit each environmental management requirement, including training personnel, keeping records and providing reports

- Cross-references to other sustainability, environmental or other management related documents, such as a work method statements, statement of heritage significance and occupational health and safety (OHS) management plan

1 - Formalised Management System: Auditing

A formalised environmental management system (EMS) is a program that can be used to identify, manage, audit and reduce environmental impacts, and generate reports on environmental performance progress. It must provide a systematic and methodical approach to planning, implementing and reviewing an organisation's response to those impacts.

The formalised EMS must set out procedures designed to meet the environmental performance requirements most relevant to the construction works, as outlined in a site-specific EMP. The management system may also be integrated with other management systems (such as occupational health and safety, risk registers, etc) to give a 'whole of business' approach – although this is not a requirement for the purposes of this credit.

The formalised EMS must have the following key components, as outlined in current best practice guidelines¹:

All projects:

- a. Commitment and policy
 - Environmental policy
- b. Planning
 - Review and identification of environmental aspects and impacts
 - Identification of legal and other requirements
 - Setting objectives and targets
- c. Implementation
 - Resources
 - Roles, responsibility and authority
 - Competence, training and awareness
 - Documentation
 - Operational control
 - Emergency preparedness and response
- d. Measurement, evaluation and response
 - Monitoring and measuring performance
 - Corrective and preventive action
 - Control of records
- e. Review
 - Internal and management review
- f. Communication
 - External communication

¹ Key elements to suit the AS/NZS ISO 14001 clauses, but not necessarily third-party certified.

The detailed requirements for each of the elements above must be in alignment with best practice guidelines, such as the requirements outlined within the latest NSW Environmental Management Systems Guidelines or within AS/NZS ISO 14001 clauses.

These compliance requirements do not address third-party certification, but rather the development and implementation of a best practice EMS as outlined above.

The 'External Communication' component of these requirements is particularly important to demonstrate compliance with these requirements. This is particularly relevant to smaller organisations (30 staff or fewer) that may not wish to pursue third-party accreditation of their EMS.

All systems are to follow the basic stages of top level commitment, identification of impacts, review, target setting, action plan, monitoring and reporting. The process is to be frequent and ongoing. Any of these must set out the following:

- A degree of high level commitment;
- Key environmental impacts are to be identified and prioritised;
- Targets are to be set and an action plan established;
- Key responsibilities are to be spelt out with names attached; and
- Monitoring is to be carried out, with the reporting of this monitoring to senior management.

An external auditors' report confirming evidence of effective use of the formalised management system must be provided to achieve the outcomes of this criterion.

There are no further requirements for projects with a contract value higher than \$10 Million, for the purposes of this criterion.

2 - Third-party Certification

A formalised management system may be certified by a third-party, such as organisations that provide independent verification of ISO standards (or equivalent AS) and are members of the International Accreditation Forum. These include AS/NZS ISO 14001, BS 7750 and the European Community's EMAS.

These compliance requirements encourage the organisation using an independent certifier to affirm that the Environmental Management System meets all the requirements of an accepted third-party standard.

All projects:

The certificate of conformity with the standard of choice must be available and specifically linked to the organisation's construction practices, for this point to be awarded.

There are no further requirements for projects with a contract value higher than \$10 Million, for the purposes of this credit.

Where multiple buildings are seeking a single certified rating, an EMP for the entire project site area, is an acceptable way to demonstrate compliance with this criterion. In addition, the Principal/Head Contractor for each building and/or piece of infrastructure in the project site area must have a valid certificate before and throughout construction for this requirement to be met. All subcontractors must be required to adhere to the EMP conditions, and monitored for compliance.

Guidance

Alternative Compliance Methods

A Credit Interpretation Request may be submitted to the Green Building Council of Australia (GBCA) when an applicant wishes to advocate for an alternative yet equivalent method of meeting Compliance Requirements. It is a formal process, reviewed either by the GBCA, or by independent external assessors, depending on the complexity of the issue.

Standards or guidelines relevant to in this credit

ISO Standards - ISO (International Organisation for Standardisation) is the world's largest developer and publisher of International Standards.

Australian Standards (AS) – Australian Standards are standards developed by Standards Australia, the nation's peak non-government Standards organisation. It is charged by the Commonwealth Government to meet Australia's need for contemporary, internationally-aligned Standards and related services.

Definitions

International Accreditation Forum

The IAF is the world association of Conformity Assessment Accreditation Bodies and other bodies interested in conformity assessment in the fields of management systems, products, services, personnel and other similar programmes of conformity assessment. Its primary function is to develop a single worldwide program of conformity assessment that reduces risk for business and its customers, by assuring them that accredited certificates may be relied upon. Accreditation assures users of the competence, and impartiality of the body accredited.

Documentation Requirements

‘Design Review’ Submission (Optional)

Project teams going through a ‘Design Review’ are to submit the documentation marked with an asterisk* below.

As Built Submission

All project teams are to submit the following documentation:

Submission Template*:

- Description of Environmental Management Plan scope.
- Compliance matrix showing how the requirements of Section 3 of the NSW Environmental Management System Guidelines are fulfilled.

Supporting Documents

Project teams are required to provide documentation supporting credit compliance. The following documents may be used to demonstrate compliance:

- **Environmental Management Plan (EMP)**, clearly demonstrating compliance with the requirements of Section 3 of the NSW Environmental Management System Guidelines.
- **Confirmation of subcontractor adherence to the EMP requirements** that any subcontractors relevant to the project adhered to the EMP provisions at the time of construction works.
- **Contractor Formalised Management System for Auditing** External Auditor’s report confirming formalised management system was in place and operational at the time of construction works.
- **Contractor ISO 14001 certificate** showing the date of issue prior to the commencement of construction works.

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