

Guideline for the Preparation of a Contractor's Environmental Management Plan

EHTM Attachment 10A

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Abbreviations/ Glossary

Term/ Acronym	Meaning
CAZ	Contractor's Activity Zone
CEMP	Contractor's Environmental Management Plan
Contractor	Contractor engaged to prospectively engaged to undertake project works
The Department or DIT/ Principal	Department for Infrastructure and Transport
EHIA	Environment and Heritage Impact Assessment
EHTM	Environment and Heritage Technical Manual
EMR	Contractor's Environmental Management Representative as defined in Master Specification PC-ENV1 or other Contract Documentation (whichever takes precedence)
Guideline	Guideline for Contractor Environmental Management Plan Preparation
Project Area	Area in which a project can have an effect on environmental and heritage aspects. Includes both the construction and operational footprints and surrounding receptors.
Contract Documentation	Contract Scope and Technical Requirements; Functional and Operational Requirements; Contract or Project Scope
Receiving environment/ community	The environment or community affected by an aspect of the activity.

1 Introduction

The Guideline for the Preparation of a Contractor's Environmental Management Plan (the Guideline) forms Attachment 10A of the Department for Infrastructure and Transport's (the Department) Environment and Heritage Technical Manual (EHTM). This Guideline applies to a range of Department programs and projects including the delivery of road, rail, marine and other infrastructure, as required. The Guideline applies to employees of the Department (direct or contracted) and others operating under the direction of the Department.

This guideline should be read in conjunction with Master Specification Part PC-ENV1 – Environmental Management.

An effective Contractor's Environmental Management Plan (CEMP) will assist the Contractor in demonstrating that it is meeting legislative environmental compliance, particularly its general environmental duty in accordance with the *Environment Protection Act 1993* (EP Act), as well as environmental standard industry practice.

A CEMP is a controlled document required to be prepared by the Contractor prior to works commencing on site. The CEMP must address Contract Documentation, any commitments or recommendations made during the Environment and Heritage Impact Assessment (EHIA) for the project as well as any conditions of environmental authorisations obtained for the project works. Commonly, as required by the contract, the review and endorsement of the CEMP by the Department will be required prior to the commencement of works at a site.

Depending on the type of works and type of contract, the CEMP may be required to be prepared prior to submission of a development application or application for other environmental authorisations.

The CEMP must detail how the environmental management requirements will be implemented and managed during project works. It is designed to assist the Contractor to plan, document and implement effective strategies that will minimise the environmental impacts associated with delivery of the project. For example, it should include information about how the Contractor will minimise and mitigate environmental impacts and undertake a continuous improvement process through activities such as inspections, monitoring, verification and auditing.

An effective CEMP should:

- be specific to the project site and the activities being undertaken;
- identify and implement the mitigation measures and commitments identified as part of the EHIA and any environmental authorisations;
- identify and implement the mitigation measures associated with the construction methodology;
- be compliant with relevant environmental legislation;
- ensure the environmental risks associated with the project are properly managed; and
- include provision for continual improvement.

The purpose of this Guideline is to ensure a minimum standard and consistent approach to the preparation of CEMPs.

Additional information regarding the development of a CEMP can be found in the EPA (2021) Guideline for Construction Environmental Management Plan.

1.1 Performance Outcomes

In order to meet the performance requirements under this section, unless specified otherwise in the Contract Documentation, the following shall be achieved through the development of a CEMP:

- the Contractor's works must meet or exceed all environmental requirements specified in the Contract Documentation and as required by legislation;
- the CEMP must address the outcomes of the Environment and Heritage Impact Assessment and environmental authorisations for the project; and
- continual improvement in environmental management should be demonstrated for the duration of the project work.

1.2 Contractor's Responsibilities

The Contractor is responsible for activities including:

- identifying the person(s) responsible for the preparation, implementation, maintenance and overall management of the CEMP (this is likely to include the Contractor's Environmental Management Representative [EMR]);
- preparing the CEMP and ensuring that it addressing legislative and contractual requirements;
- adhering to CEMP related Hold Points under the Contract;
- implementing the CEMP, including ensuring that the CEMP is covered in inductions for all Contractor and sub-Contractor staff;
- maintaining the CEMP, including management review and approval, and internal auditing of the effectiveness of the CEMP against the Contract; and
- reporting on the CEMP in accordance with Contract Documentation.

1.3 Other Responsibilities

The Department and/or an independent verifier (as specified in the Contract Documentation) is responsible for activities including:

- the release of CEMP related Hold Points in accordance with the Contract Documentation, and
- the external auditing of the effectiveness of the CEMP against the requirements of the Contract Documentation and on-site activities.

2 Development of the CEMP

A CEMP is a living document that once established, requires continual implementation and maintenance. The Contractor shall establish a CEMP prior to the commencement of works on-site. This includes preparing the CEMP, and obtaining the release of related Hold Point(s) as per the Contract Documentation. The Contractor shall then implement and maintain the CEMP for the duration of the Contract. This includes ongoing review and continuous improvement based on the outcomes of inspections, monitoring and auditing, including any identified corrective actions and issues arising from non-conformances.

Further information regarding the content of a CEMP can be found in EPA (2021) Guideline for Construction Environmental Management Plan.

2.1 Structure

The size of the project and significance of potential environment impacts will determine the scope, content and format of the CEMP. Consequently, CEMP template documents have not been provided, however, Table 2.1 details the content generally expected to be addressed within the CEMP.

The CEMP must include reference to relevant environmental legislation, standards, codes of practice and environmental authorisations (including approvals, licenses, permits or exemptions). Refer to Appendix B for key considerations for an effective CEMP.

Table 2.1 Overview of General CEMP Content

CEMP Aspect	Description of Expected Content
Project Background	Introduction
	Project description and site setting including a location plan
	Details of the receiving environment/ community including sensitive receivers within/ surrounding the Project Area
	Description of construction activities, timing and schedule including operating hours

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CEMP Aspect	Description of Expected Content
	<p>CEMP objectives and targets</p> <p>Description of the role of the CEMP and how it will be utilised during the Contract</p> <p>Details of the Contractor's Environmental Management System including the Contractor's Environmental Policy, reference to the Contractor's relevant environment related policies, manuals and work procedures and document control system</p> <p>CEMP interface with other plans</p> <p>Details of community and stakeholder engagement in relation to environmental aspects</p>
<p>Environmental Management Resources</p>	<p>Responsibilities</p> <p>Organisational chart specific to the Contract showing leadership, reporting relationships and highlighting personnel with specific environmental management responsibilities (including sub-contractors).</p> <p>Regulatory requirements including approvals, licensing and environmental authorisation requirements</p> <p>Training and environmental awareness required and evidence of environmental training/ demonstration of competency</p> <p>Contact details for key project personnel</p> <p>Emergency contact details and emergency response</p>
<p>Environmental Risk Assessment and Mitigation</p>	<p>Environmental risk assessment of all work activities, informed by the outcomes of the EHIA and the proposed design and construction methodology.</p> <p>Details of the environmental management activities, mitigation, control and contingency measures required to address the identified environmental risks, including supporting maps where required (e.g. Environmental Control Plans or similar). This could include Construction Work Method Statements (or similar) for activities identified as high risk or above (pre-treatment).</p> <p>Environmental management plans including sub-plans (i.e. Sediment Erosion Drainage Management Plan, Construction Noise and Vibration Management Plan) (refer Section 2.5). These may be included as Appendix to the CEMP.</p> <p>Summary of hold points related to the CEMP</p> <p>Details of the Contractor's Activity Zone (CAZ - including maps and drawings) as well as details of any approved alterations to the CAZ.</p> <p>The approach to inspection, monitoring and testing to verify compliance with the specified environmental requirements – this could include a schedule table (refer to example shown in Appendix A).</p>
<p>Performance Evaluation and Review</p> <p>Note that the overall objective of this aspect is to demonstrate the method(s) to ensure the Contractor's works, and the work of its subcontractors complies with the environmental requirements of the Contract.</p>	<p>Process for ensuring that the Contractor's personnel and sub-contractors understand all environmental requirements of the Contract Documentation, including a procedure for conducting environmental inductions</p> <p>Inspection and audit schedule</p> <p>Reporting schedule to demonstrate compliance with the CEMP, legislative requirements and the Contract requirements.</p> <p>Process for incident and emergency response and reporting</p> <p>Process for receiving, recording and responding to complaints</p> <p>Process for managing non-conformances</p> <p>Process for amending the CEMP</p>

2.2 Environmental Risk Assessment

The CEMP is to be informed by an environmental risk assessment including the identification and analysis of environmental aspects and impacts and the mitigation measures required to manage such associated risks. This risk assessment should be informed by the outcomes of the EHIA and the proposed design and construction methodology.

The process to be adopted for environmental risk assessment should follow the generic framework in AS/NZS ISO 31000-2009 Risk Management. The environmental risks should be evaluated and translated into practical construction (or operation, where relevant) management measures to be implemented as part of the CEMP. The risk assessment may also be expanded to include opportunities for environmental enhancement or beyond business as usual approaches.

A copy of the environmental risk assessment should be included within/appended to the CEMP.

2.3 Environment and Heritage Impact Assessment

The Contractor shall review any Environment and Heritage Impact Assessment (EHIA) Report and investigations (including detailed design reports) undertaken in the previous project phases, and ensure that delivery recommendations, mitigation measures or requirements are incorporated into or addressed in the CEMP. This will ensure that issues or risks identified in the EHIA Report and planning and design phases of a project are implemented in the delivery phase.

2.4 Stakeholder Engagement

The Contract Documentation may require consultation during the preparation of the CEMP. Details of any and all consultation must be appended to the CEMP. The following details should be recorded:

- who was involved in the consultation;
- format of the consultation;
- record of the consultation including stakeholder views, opinions and requests; and
- record of how the stakeholder views, opinions and/or requests were addressed/not address in the CEMP.

If stakeholder endorsement is required, record of such endorsement must also be appended to the CEMP.

Care should be taken not to include any sensitive or confidential details in the CEMP.

The Contractor may also develop project specific environmental management factsheets outlining the processes to be followed to enhance opportunities or to minimise impacts to the environment and local community.

2.5 Environmental Aspect Specific Management Plans

Management plans for specific environmental aspects may be incorporated into the CEMP or be standalone documents (these are often referred to as sub-plans to the CEMP). The CEMP must reference any such standalone documents. Management plans must be prepared by appropriately qualified and experienced specialists included on or eligible for inclusion on the Department's Professional and Technical Services prequalification.

The Contract Documentation, including the Department's Master Specification and the EHIA Report for the project, stipulate the required management plans for specific environmental aspects. In general, the following management plans may be required:

- Soil Erosion and Drainage Management Plan ;
- Water Quality Monitoring Plan;
- Construction Noise and Vibration Management Plan;
- Fauna Protection and Underwater Noise Management Plan;
- Vegetation and/or Weed Management Plan (including Phytophthora Hygiene Management);

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- Access, Screening and Containment Plan (Works Over Water);
- Air Quality Management Plan;
- Contamination/Remediation Management Plan ;
- Cultural Heritage Management Plan;
- Conservation/Heritage Management Plan; and
- Environmental Emergency Response Plan/Procedure.

Guidance for the preparation of these sub-plans is provided in other parts of the Environment and Heritage Technical Manual.

2.6 Continual Improvement

Regular inspection, monitoring and auditing against the environmental requirements of the project Contract Documentation, together with verification and reporting, will assist in reviewing and improving the effectiveness of the CEMP. This may include internal or external monitoring, auditing and reporting conducted by the Contractor, Principal, a verifier, auditor and/or environmental specialist.

The Contractor must provide a status report on the implementation of the CEMP at intervals specified in the Contract Documentation, or at a minimum of every six (6) months. The report must include a response and evidence that addresses the following questions:

- Has the Contractor implemented all measures identified in the CEMP?
- Is the CEMP operating effectively to manage the environmental risks?
- Has the CEMP been continually updated to reflect changes in work activities/locations, and does it address current work activities?

Pending the outcomes of the monitoring, auditing and reporting undertaken in accordance with the CEMP, updates to the CEMP may be required. A new, tracked version of the CEMP is to be issued to the Principal for review following each amendment.

Where an internal or external environment audit has been undertaken, any non-conformances or opportunities for improvement shall be addressed in updates to the CEMP.

Appendix A – Example CEMP Schedule Table

Following is an example of a CEMP schedule table which may be used to summarise the management action, inspection, testing and responsibility requirements detailed in the CEMP.

Table 2 Example CEMP Schedule Table

Contract Clause	CEMP Measure	Action	Inspection Frequency	Test Requirement	Test Frequency	Acceptance Criteria	Evidence	Personnel Responsible
<i>PC-ENV2 – Clause 8.2</i>	<i>Construction Noise and Vibration Management Plan: No vibration induced damage.</i>	<i>Vibration monitor installed in proximity to State Heritage listed property</i>	<i>Daily (to ensure vibration monitor is in situ and operating correctly)</i>	<i>Vibration levels adjacent State Heritage listed property</i>	<i>Ongoing during works</i>	<i>Vibration levels below structural damage thresholds (refer DIN 4150-3 Structural Vibration Part 3)</i>	<i>Monitoring records Vibration report</i>	<i>Environmental Management Representative Vibration specialist</i>

Appendix B - Considerations for an Effective CEMP

The following key considerations should be made during the preparation of a CEMP to ensure the adequacy and relevance of the CEMP:

CEMP Structure

Is the CEMP:

- A management tool showing how environmental impacts will be controlled?
- Well defined with clear document structure?
- Clearly and concisely written?
- Written in a language and format suitable for end users (i.e. construction and operation personnel)?
- Site specific?
- Prescriptive and realistic?
- Easy to update following review outcomes?
- Auditable?

CEMP Content

Does the CEMP contain:

- Only relevant details?
- Environmental objectives and/or performance criteria?
- Clear allocation of responsibilities?
- Project specific approvals/environmental authorisations and subsequent conditions?
- Clear identification of environmental controls including responsibility and timing?
- Definition of assessment criteria that trigger review/contingency measures?
- Environmental training requirements?
- The Contractors Environmental Policy?
- Reporting and auditing requirements?
- Relevant discovery procedures?

CEMP as a Management Tool

Does the CEMP:

- Reflect the level of available information (including a statement of limitations, if required)?
- Identify areas of uncertainty and associated contingency measures (if uncertainty exists)?
- Address commitments made during the EHIA process?
- Contain an Environmental Risk Assessment?
- Utilise plans/ maps to illustrate requirements i.e. sensitive sites, locations of controls, exclusion zones around protected areas?