

Guideline for Environmental Audits in Construction

EHTM Attachment 10B

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Abbreviations/ Glossary

Term/ Acronym	Meaning
Aspect	The element of the activity that interacts with the environment and has the potential to impact the environment.
Audit observation	Minor items that need improvement, but do not constitute a clear breach of environmental standards
Corrective Action Request (CAR)	Request to the Contractor from the Principal to rectify, remove or re-submit any non-conforming product, work activity or process that does not comply with the Requirements and / or undertake action to prevent the reoccurrence or mitigate the unacceptable risk to the Principal of potential non-conformance of the product
CEMP	Contractor's Environmental Management Plan
EMP	Environmental Management Plan
EMS	Environmental Management System
Contract Documentation	Contract Scope and Technical Requirements; Functional and Operational Requirements; Contract or Project Scope
Contractor	Contractor engaged to prospectively engaged to undertake project works
The Department/ Principal	Department for Infrastructure and Transport
EHIA	Environment and Heritage Impact Assessment
EHTM	Environment and Heritage Technical Manual
Guideline	Environmental Audit Guidelines for Construction
Impact	The effect of the interaction of an aspect with an environmental factor.
Non-Conformance	Failure of the Contractor to comply with the requirements of the Contract Documentation or legislation. The Non-conformance would usually result in the preparation of a Non-conformance Report (NCR).
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
Requirements	Need or expectation that is stated within Legislation and/ or the Contract Documentation
SEDMP	Soil Erosion Drainage Management Plan

1 Introduction

The Guideline for Environmental Audit Guidelines for Construction (the Guideline) forms Attachment 10B 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.

Environmental audits are required to monitor the Contractor's environmental performance (as well as that of its subcontractors) for the duration of a construction/delivery or maintenance contract. Environmental performance is to be measured against the Contractor's Environmental Management Plan (CEMP – including sub-plans) and the requirements of the Contract Documentation. Consideration of the Environment and Heritage Impact Assessment (EHIA) for the project works should also be made.

In accordance with the Department's Master Specification Part PC-ENV1 – Environmental Management, environmental audits of Contractor's systems and activities may be undertaken via external parties (e.g. Construction Verifier or Auditor engaged by the Department) or undertaken internally by the Contractor. This Guideline apply to both scenarios.

Environmental audits are to be planned, conducted and managed in accordance with Australian/New Zealand Standard AS/NZS ISO 19011:2019. This Guideline provides further guidance/information, specifically relevant to works generally undertaken by the Department and its contractors.

This Guideline provides information to support the environmental audit process, including:

- The purpose of environmental audits;
- Selection of auditors, including qualifications;
- Audit procedures including the preparation, conduct and reporting of audit findings; and
- Responsibility for implementing follow-up action.
- Completion of a rail noise assessments that demonstrates compliance with applicable legislation and the GARNI; and
- Identification of noise mitigation to be provided in accordance with the GARNI.

It is the responsibility of all employees and contractors to adopt environmentally responsible work practices. This Guideline will provide the Department and its Contractors a consistent basis to monitor compliance against legislative and Departmental requirements.

This Guideline does not apply to site contamination audits or audits of ISO14001:2015 certified Environmental Management Systems (EMS) as it is expected that these processes are undertaken in accordance with separate guidance.

1.1 Performance Outcomes

In order to meet the performance outcomes under this section, unless specified otherwise in the Contract Documentation, the following should be achieved:

- The environmental audit should be planned and scheduled to effectively assess all aspects of the Contractor's environmental performance;
- The environmental audit should be utilised to review the environmental performance of a Contractor and provide feedback on the environmental management systems in place for the project works; and
- The outcomes of the environmental audit should facilitate continual improvement in environmental management adopted for the duration of the project work.

2 Purpose of Environmental Auditing

Environmental audits provide a mechanism for reviewing the environmental performance of a Contractor during the undertaking of project works. An effective environmental audit will determine if the works are being undertaken in a manner that meets the Contractor's requirements under legislation, including the general environmental duty as defined in the *Environment Protection Act 1993*; demonstrates suitable environmental practice and meets the Department's requirements as detailed in Contract Documentation.

The outcomes of an environmental audit will address the following:

- Are environmental goals, objectives, policies, guidelines and targets set by the Department being achieved?
- Are the current environmental management systems and requirements relevant and effective in achieving the Departments objectives?
- Are regulatory requirements being met?
- What opportunities exist to improve environmental performance?
- What corrective action should be undertaken to improve environmental performance and by whom?
- Are regular management reviews conducted to find ways to improve environmental performance?

An environmental audit is, and should be viewed, as a valuable management tool to readily identify and document improvement opportunities and enable environmental performance to be continually improved.

3 Preliminaries

3.1 Environmental Auditor Qualifications

Depending on the Contract Documentation, the Auditor will either be appointed by the Department directly or engaged by the Contractor.

The Auditor selected must be suitably qualified and independent of the project. The Auditor should possess a recognised tertiary environmental qualification and have at least 5 years of recent relevant experience in being a lead auditor.

3.2 Audit Schedule

The internal and external audit schedule will be defined in the Contract Documentation and should be reflected in the CEMP for the project. Where possible, the audit schedule should coincide with the undertaking of higher risk construction impact activities and mandatory hold point release dates.

4 Audit Procedure

Figure 1 details the general audit management procedure from initiation to review and feedback. Details to support each of the key processes are provided in the following sub-sections. As previously detailed, the general procedure for the environmental audit must be in accordance with AS/NZ ISO 19011:2019, with this Guideline providing further details specific to the Department's projects.

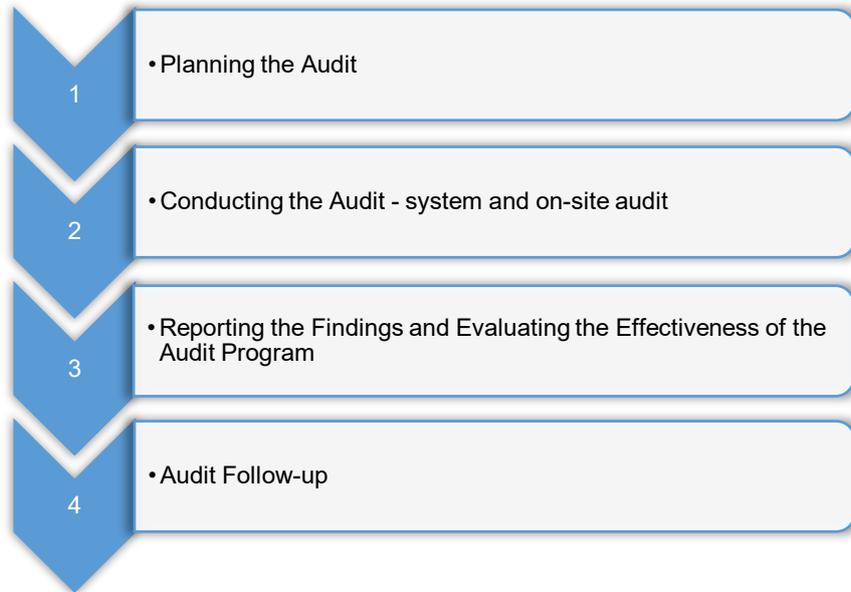


Figure 1 Summary of Environmental Audit Process

4.1 Planning the Environmental Audit

Effective planning is essential to ensure that the environmental audit outcomes satisfy the performance outcomes detailed in Section 1.1. The audit plan should include:

- the date, time, location and expected duration of the audit;
- environmental audit objectives and scope;
- identification of the project to be audited, including project summary;
- identification of audit team members;
- statement of qualifications for the Auditor/ Audit team;
- identification of the Department's and Contractors' personnel having direct management responsibilities for the project;
- schedule of meetings to be held with the Contractor;
- identification of audit criteria and reference documents including legislation, approvals, policies, codes of practice, standards, plans and project specific requirements;
- the history of previous audits, non-compliances and corrective action verification;
- identification of high priority issues of the Contractor's environmental performance;
- inspection requirements;
- confidentiality requirements; and
- environmental audit report format, structure, expected date of issue and distribution.

The audit plan should be forwarded to the Contract Manager and the members of the audit team (if a team audit is scheduled) by the (lead) Auditor prior to the audit. The Contract Manager should review and agree on the proposed audit plan with the (lead) Auditor prior to the audit.

4.1.1 Scope and Objectives

The audit scope must be project specific and needs to specify the activities and areas to be audited and how the audit findings will be reported. The Auditor should consult Contract Documentation when determining the scope of the audit. The audit should be based on clearly defined and documented objectives.

The Auditor shall advise the Department's Contract Manager of the proposed objectives of the audit plan and high priority issues recommended for audit.

Where necessary the Auditor shall liaise with the Department's Contract Manager or Contactor's representative to arrange the audit logistics and agree on the relevant details of the proposed audit.

4.1.2 Preliminary Document Review

At the commencement of the audit process the Auditor should identify and review applicable documentation. The documentation to be reviewed may include key documents from the project initiation and planning phases in conjunction with the relevant legislation, approvals, policies, standards, codes of practice, guidelines, reports, plans and construction drawings.

The CEMP (including sub-plans for specific environmental aspects) and relevant sections of the Department's Master Specification and Contract Documentation will be key documents to review as they define environmental management requirements to mitigate the project's impacts. The review of the relevant documentation will enable the audit criteria to be established. The audit criteria provide the basis against which the Auditor compares collected audit evidence.

4.1.3 Developing the Audit Checklist

Once the Auditor has defined the scope and objectives, conducted a review of relevant documents and prepared the audit plan, an audit-specific checklist should be developed.

Preparing and adopting a checklist during the environmental audit will ensure that:

- the audit is conducted in accordance with the defined scope and objectives;
- important issues are not overlooked;
- there is a record of objective evidence;
- there is a record of the questions asked during the audit;
- the audit findings are reported accurately; and
- documented audit evidence is recorded.

When developing checklist questions, a useful technique is to turn the procedure statements contained in the Project EMP and Contactor's EMP (where these exist). For example:

Using a typical statement from a CEMP:

"Monitor suspended solids at chainage 500 m downstream of the site in accordance with the monitoring schedule" (Note: Project specific suspended solids limit not to exceed 100 mg/L".

Audit question in checklist:

"Has monitoring of suspended solids at chainage 500 m downstream of the site been conducted in accordance with the monitoring schedule?"

"Is documented evidence available to indicate compliance with the monitoring schedule and the specified limits?"

4.2 Conducting the Environmental Audit

4.2.1 Entry Meeting/Initiation with the Contractor

The Auditor should set up an audit initiation meeting (or entry meeting) with the Contractor. The entry meeting should be conducted in a friendly yet efficient manner, fostering a cooperative environment.

During the entry meeting, the following should be addressed by the Auditor:

- introduce the audit team to site personnel;
- explain the purpose of the environmental audit and review the audit plan;
- provide a short summary of the methods and procedures to be used to conduct the audit;
- confirm communication channels;
- confirm the time for the exit meeting;
- clarify any unclear details of the audit plan;
- re-affirm confidentiality requirements;
- request access to relevant information/documentation;
- set up and take minutes of the opening meeting;
- establish an attendance list;
- confirm that all concerned are aware of the audit;
- confirm if any guides are required; and
- confirm any special conditions or site access restrictions (i.e. safety awareness, restricted areas, site procedures).

4.2.2 Collecting Audit Evidence

Sufficient audit evidence should be collected and evaluated to determine whether the Contractor's activities and processes meet the established audit criteria.

Audit evidence should be collected through interviews, document review and observation of site activities and conditions. Testing may be required in some instances (i.e. to confirm if discharge criteria are being met/if the Contractor's sampling equipment is appropriately calibrated).

The audit shall include auditing of Contractor's environmental systems (e.g. CEMP and sub-plans, work method statements, etc.) and on-site activities.

Particular attention should be paid to compliance with legislative requirements and performance or licence approval conditions. The audit team should examine the effectiveness of, and compliance with, the monitoring programmes required to provide objective evidence of the effectiveness of environmental management and control measures.

The Auditor shall use professional judgement to identify:

- conformances;
- non-conformances;
- improvement requirements (actions and timeframes for rectification to be agreed, generally based on the level of environmental, community or reputational risk, etc.);
- observations.

Areas of departure or non-conformance from the audit criteria shall be noted and recorded in the audit report.

Note

A Non-conformance may be raised in the following situations, but not limited to:

- breach of or non-compliance with legislative requirements (e.g. pollution event; reasonable and practicable measure to avoid pollution not implemented, such as SEDMP; damage to heritage sites; approval conditions not met, etc.);
- breach of contractual requirements (e.g. CEMP not adequately prepared and/or Hold Points not released, works outside the agreed Contractor's Activity Zone (CAZ); etc.);
- breach of environmental standards;
- not achieving commitments in the CEMP (e.g. monitoring requirements not undertaken; inappropriate storage of contaminated spoil, etc.); and
- corrective actions or improvement requirements not being achieved by required or agreed timeframes.

Improvement requirements may apply where a reasonable attempt to satisfy contractual requirements or CEMP has been evidenced (to the satisfaction of the Auditor) but is not fully compliant.

Audit observations may include minor items that need improvement, but do not constitute a clear breach of environmental standards or positive observations of good environmental practice. It would be expected that the Contractor would respond to an observation by remedying its practices as required.

4.2.3 Collating Audit Observations

Having completed the collection of evidence, the audit observations are to be reviewed and collated to determine if any environmental management activities do not satisfy the audit criteria (which should reflect environmental performance with respect to legislative compliance). Adverse or non-conforming activities requiring corrective action should be the subject of a Corrective Action Request (CAR) or Non-Conformance Report (NCR) and be documented in a clear, concise manner and supported by audit evidence.

Audit findings should be reviewed with the Contractor's representative with a view to obtaining acknowledgement of the factual basis of all findings of non-conformity.

4.2.4 Exit Meeting

The audit shall conclude with an exit meeting prior to preparation of the audit report. The meeting should be held with those assigned responsibility for the site management. The primary reason for this meeting is to present audit observations in a manner that ensures the results of the audit and the basis for the results are understood.

The Auditor should ensure the following issues are dealt with:

- meeting proceedings are recorded;
- attendance is recorded;
- audit objectives are reiterated;
- audit observations are summarised;
- applicable evidence is noted; and
- conclusions are presented and CAR's issued, if necessary.

If any disagreement with the findings occurs these should be noted in the audit report. However, disagreements should be resolved, if possible, before the issue of the audit report.

4.3 Reporting and Evaluating Effectiveness of the Audit Program

The Auditor should report the audit conclusions in accordance with the audit plan and the considerations detailed in Section 5 of this Guideline.

The audit report should be distributed as per the audit plan distribution list and the Department's Contract Manager promptly after the exit meeting (within an agreed period of time).

The audit is completed once all activities defined in the audit plan have been concluded.

4.4 Audit Follow-up

The full value of the environmental audit is only obtained if the audit findings are acted upon. The outcome of the audit can, depending on the audit objectives, indicate the need for corrections, or for corrective actions or opportunities for improvement.

The Auditor is not responsible for determining and implementing any required corrective action. The Auditor is, however, responsible for:

- identifying areas of improvement; and, if requested;
- verifying, at a later date, that agreed corrective action has been implemented and is effective in mitigating construction impacts.

CAR's may be closed out by the Department's Contract Manager or, where applicable, the Construction Verifier in liaison with the Contractor's Site Supervisor/Manager. CAR's shall be closed out in a timely manner.

5 Deliverables

Unless specified otherwise in Contract Documentation the following deliverable is required as part of the completion of an environmental audit.

Audit Report

The audit report should provide a complete, accurate, clear and concise record of the audit. The audit report should be brief, understandable, accurate and factual. The Auditor should not interpret facts or include post audit information. The report should include a summary of the audit with reference to supporting evidence (including photographs).

The following minimum information should be included in the audit report:

- the audit objectives, scope of audit including details of the audited Contractor;
- details of the commissioner of the audit;
- identification of the audit team as well as auditee's participants in the audit;
- dates and locations where the audit activities were undertaken;
- audit criteria, findings and related evidence (including photographs);
- audit conclusions including a listed summary of non-conformances and improvement requirements (if any);
- a statement on the degree to which the audit criteria have been fulfilled;
- details of any unresolved differences in opinion between the audit team and the auditee; and
- the effectiveness of the audit program and recommendations for improvement during future environmental audits for the project and more broadly.

Other information that may be addressed in the audit report (depending on the agreed scope of works) include the following:

- a summary of the audit process including any limitations encountered during the audit that may decrease the reliability of the audit conclusions;
- any aspects of the audit scope that were not able to be addressed/ assessed including any issues of availability of evidence, resources or confidentiality (with related justifications);
- agreed action plan follow-up, if any;
- a statement of the confidential nature of the contents; and
- any implications for the audit programme or subsequent audits.

The audit report should be distributed as per the audit plan distribution list and the Department's Contract Manager promptly after the exit meeting (within an agreed period of time).

AND

As detailed above, an outcome of the audit will be a list of improvement requirements and/or non-conformances (if relevant). This is to be updated by the Contractor as items are addressed including details of the action undertaken and the date such actions were completed. Where the action list is provided to the Auditor for review, the Auditor is required to update the list with a comment stating if the actions undertaken are acceptable or if further works are required as well as the date of the review and response timeframe for the Contractor.

Recording and Verification of Actions

As per the requirements for the Audit Report, an outcome of the audit will be a list of improvement requirements and/or non-conformances (the action list).

The action list is to be updated by the Contractor as action items are addressed. Details of the action undertaken and the date such actions were completed are to be provided.

Where the action list is provided to the Auditor for review, the Auditor is required to update the action list with a comment detailing if the actions undertaken are acceptable or if further works are required as well as the date of the review and response timeframe for the Contractor.