

CS ENERGY PROCEDURE

ENVIRONMENTAL AUDIT, REVIEW AND PERFORMANCE EVALUATION CS-ENV-07

Responsible Officer: Environmental Specialist
 Responsible Manager: Head of Health Safety and Environment
 Responsible Executive: Executive General Manager Plant Operations

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1 PURPOSE

This procedure outlines the requirements for producing environmental performance reports at CS Energy. It also defines the reviews that are to be performed and their frequency.

The Environmental Audit Review and Performance Evaluation process is shown in Figure 1.

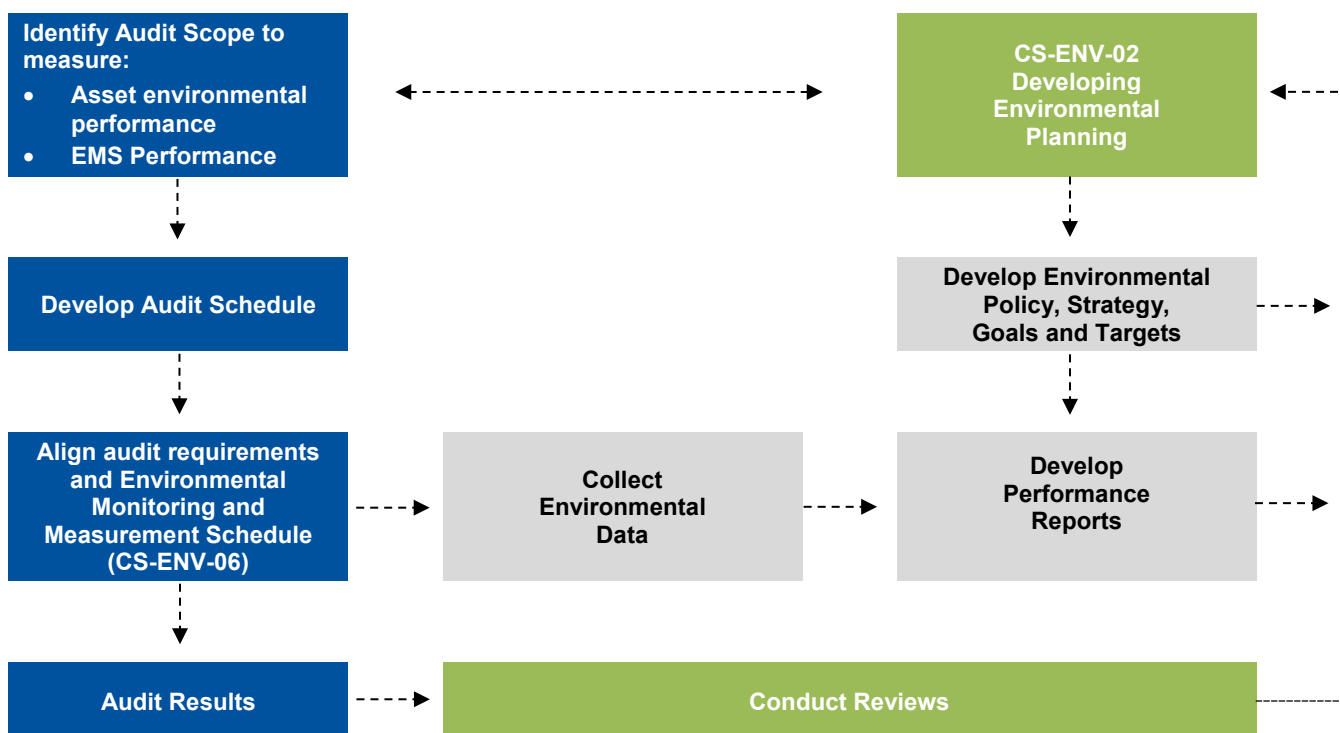


Figure 1: Environmental Audit Review and Performance Evaluation Flow Diagram.

2 SCOPE

This procedure applies to the performance of the Environmental Management System (EMS) and business operations (assets and equipment). The outputs from this procedure support the EMS.

This procedure outlines the performance indicators to review CS Energy's stated Environment Policy, goals, objectives and targets.

3 ACTIONS

The instructions that follow focus on collecting information for measuring:

- EMS Performance.
- Asset environmental performance.

This information is monitored and measured through EMS Procedure - CS-ENV-06 - Environmental Monitoring and Measurement and the environmental monitoring and reporting schedule developed and deployed at the corporate and site levels (described in Section 3.2 below).

3.1 Environmental Auditing and Audit Reports

3.1.1 Audit Scope

Three types of audits will be conducted at CS Energy:

- **Environmental Legal Compliance Audits** will assess the current compliance status of the organisation. The scope of a legal compliance audit may include Environmental Authority requirements and other pertinent legislation. Aspects of legal compliance are audited at a frequency approved by the Board Audit and Risk Committee and as described in the Assurance Plan (Refer Procedure - CS-AUD-1 - Internal Audit).
- **Environmental Management System Audits** will review environmental issues on site and the effectiveness of the EMS at managing these. The audit should consist of a document review or desktop audit conducted in combination with an implementation or operational audit. They can be conducted internally by CS Energy staff or externally by certified EMS auditing professionals. Where possible, audit reports should present findings in a manner allowing easy updates to CS Energy documents and systems (e.g. specify activity and risk for environmental issues).
- **Technical audits** are also included in the Assurance Plan approved by the Board Audit and Risk Committee as required, to check the performance of plant or systems that are associated with significant environmental risk.

Audits are to be scheduled and documented in the Enterprise Risk Management System (CGR Insight).

3.1.2 Auditor Requirements

External Environmental Auditors should have:

- Relevant knowledge and experience (e.g. legal qualifications or process knowledge).
- Previous auditing experience.
- Registration as an environmental compliance auditor with a recognised auditor registration body.

Internal Environmental Auditors should have:

- Training in audit techniques and protocols.
- Relevant knowledge and experience.

3.1.3 Managing Audit Results

Results of audits must be managed according to the following criteria:

- Any significant risk identified from the audit is entered into CGR Insight and risk assessed accordingly.
- Relevant audit findings are to be managed, actioned and tracked to completion and verification through CGR Insight.
- Any non-conformances will be investigated in accordance with the CS Energy core incident (event) methodology – 5 Whys. The event classification will follow the process described in the Procedure - CS-IM-01 - Learning from Incidents: Item 5.10 – Repeat Incidents [B/D/11/45318](#).

All audit reports are filed in TRIM and audit recommendations are managed through CGR Insight.

3.2 Environmental Monitoring and Reporting Schedule

The Environmental Monitoring and Reporting Schedule at both the corporate and site level is managed via actions in CGR Insight. The actions ensure environmental monitoring and performance data collected on a regular and routine basis is reported as required to external and internal stakeholders.

The environmental monitoring and reporting schedule and actions in Insight consider the following requirements:

- Environmental approval monitoring and reporting requirements.
- Operational plant performance (Refer to Section 3.3).
- EMS and supporting management system performance (Refer to Section 3.4).

Through this process, a range of reports are produced, as listed below:

- External reporting requirements e.g. annual Environmental Authority returns and data summaries, Quarterly Reports to Shareholding Ministers, National Pollutant Inventory (NPI), National Greenhouse Energy Reporting Act requirements (NGERA).
- Internal reporting requirements e.g. monthly environmental report, quarterly business plan reviews.

3.3 Operational Asset Environmental Performance Monitoring and Reporting

Operational asset environmental performance monitoring is focussed on by-products of electricity generation e.g., contaminants such as NO_x, particulates, oil, ash etc. These measurements are used to understand a range of indicators that reflect how the business operations are impacting on the environment.

To determine what operational plant performance monitoring should be done, reference is to be made to:

- Procedure - CS-ENV-01 - Environmental Issue Identification Procedure.
- Procedure - CS-ENV-02 - Developing Environmental Planning Procedure.
- Environmental Issues Review (Section 3.5.1 of this procedure).
- Environmental Auditing and Audit Reports Procedure (Section 3.1 of this procedure).
- Environmental performance evaluation guidelines (AS/NZS ISO 14031:2013).

The following asset indicators should be considered:

- Parameters required by environmental authorities.
- Parameters associated with impact monitoring programs.
- Indicators associated with significant issues or current targets.
- Performance indicators required by external bodies, Shareholding Ministers, agreements, etc.

3.4 EMS Performance Reporting

EMS performance indicators are used to measure how well the management system is functioning and identify areas for continual improvement. Audits of the EMS together with measuring environmental indicators are used to determine the effectiveness of the EMS.

The following EMS performance indicators could be considered:

- Number of internal EMS audits performed in the reporting year.

- Number of external EMS audits performed in reporting year and number of major non-conformances.
- Number of environmental incidents reported and number of associated actions outstanding.
- Number of complaints received and number associated actions outstanding.
- Percentage of actions from EMS audits entered into CGR Insight.
- Number of significant issues entered into CGR Insight.
- Number of actions initiated, and percentage closed.
- Targets - number in operation and number closed.
- Goals - goals set and description of status.
- Compliance audits: number completed.
- Number of significant environmental issues identified in the reporting year.
- Number of Environmental Issue Management Plans completed.

3.5 Conduct Reviews

The following sections summarise the various review processes that occur under the EMS or other management systems. A short description is supplied to assist in defining what needs to be done or achieved from each of the processes.

3.5.1 Environmental Issues Review

Environmental Issues are to be reviewed at least once per year as part of the risk review process at sites through risk workshops and the business planning process. The review follows the CS Energy Procedure - CS-ENV-01 - Environmental Issue Identification.

The aim of this review is to:

- Identify new risks.
- Reassess all issues currently identified to verify the risk level and that the operational controls are adequate.
- Review the status of actions in any Environmental Issue Management Plans.
- Identify areas for continual improvement.

Issues and their management are reviewed by collating information such as:

- Queensland Government environmental regulator environmental approval conditions and requirements.
- Environmental Authority annual return.
- Issues arising from Environmental Team meetings.
- Issues arising from Management Review/Management Team/Workgroup meetings.
- Issues identified from existing plant refurbishment/operations.
- Plant walkarounds.
- Plant/activity environmental audits.
- Status of any Environmental Issue Management Plans.
- Status of actions required to comply with any Notices or Directions submitted to the Queensland Environmental Regulator.

- Requirements of any Operation and Maintenance Environmental Management Plans established as part of a joint venture agreement.
- Annual summary of risks, incidents, complaints.
- Changes to legislation or other requirements.
- Relevant policy, goals, targets, and objectives.

The following outcomes from this review are required:

- Risks and risk actions in the Risk Management System, CGR Insight are up to date.
- Production of Environmental Issue Management Plans.

3.5.2 Environmental Management System Audit Program (Internal and External)

Auditing will be conducted in accordance with Section 3.1 of this procedure and the EMS Audit Schedule. An internal EMS audit guidance manual has been developed to aid consistency of internal audits (refer to Instruction - CS-ENV-10 - EMS (ISO 14001:2015) Internal Audit Guidance).

The aim of these audits is to:

- Assess staff awareness of policy and goals.
- Determine the appropriateness of targets and objectives and the ability to achieve them.
- Alignment of system and processes with ISO 14001:2015.
- Assess conformance with requirements in the EMS.
- Determine whether the EMS has been properly implemented and maintained through auditing operational controls.

The following outcomes of internal and external EMS audits are required:

- Audit reports.
- Documentation of audit actions in Insight.
- Actioning of the audit findings and recommendations.

Internal audits will be carried out at a frequency determined by the Head of Health Safety and Environment. In developing the internal audit schedule, consideration should be given to:

- Recent audit findings.
- Risks.
- High risk activities (e.g. overhauls).
- Covering a range of the ISO 14001:2015 system elements each year.

3.5.3 Environmental Legal Compliance Audit

The Environmental Legal Compliance Audit will be conducted in accordance with Section 3.1 of this procedure and the EMS audit schedule.

The aim of this audit is to:

- Determine compliance with legal requirements by conducting an Environmental Legal Compliance audit.
- Ensure legal compliance audit findings are integrated with the Risk Review.
- Ensure that the EMS Procedure - CS-ENV-05 - Environmental Legal Compliance [B/D/11/31093](#) is being followed.

Outcomes required:

- Audit reports.
- Documentation of audit actions in Insight.
- Actioning of the audit findings and recommendations.

3.5.4 Environmental Business Planning Cycle

Environmental business planning will occur each financial year. Environmental business planning will be conducted for the Brisbane site and also for operational assets. The planning will consider:

- Consistency with the CS Energy Environment Policy.
- Status of targets, goals, objectives and KPIs.
- New targets and revised goals for the organisation/asset.

Outcomes required:

- Policy, goals and targets modified (refer Procedure - CS-ENV-02 - Developing Environmental Planning Publications and training material are modified accordingly).

Progress in delivering the business plan actions is reported monthly in accordance with Procedure - CS-ENV-02 - Developing Environmental Planning.

Routine internal communication methods detailed in Procedure - CS-ENV-03 - Environmental Communication and Training Processes serve as management review opportunities of environmental business planning outputs.

3.5.5 Environmental Management System Review

Management review of the EMS, including review of processes performed by the organisation, is covered in Section 9.3 of the EMS Manual (Procedure - CS-ENV-11 - Environmental Management System (EMS) Manual).

Management Review of the EMS shall be carried out by asset and corporate office management teams at planned intervals to ensure its continuing suitability, adequacy and effectiveness.

The review agenda should consider, by exception, at least the following items:

- Internal and external audits or reviews – findings from audits and planned actions to address.
- Compliance with legal and other requirements affecting CS Energy's environmental performance.
- Communications from external parties, including complaints.
- Environmental performance of CS Energy, in general including review of environmental monitoring results.
- Performance against goals, objectives, and targets – and their continuing suitability and implementation.
- Corrective and preventive actions – status.
- Improvement initiatives for the EMS.
- Outstanding action items - from previous management review meetings.

In addition, the following matters should be reviewed as required:

- EMS External audit outcomes trend analysis: use trend analysis to identify, assess and manage the number of observations, major and minor non-conformances over an audit cycle. The trend analysis will need to consider the audit scope and timeframe.

- Training and awareness requirements including the Learning Management System (LMS) Environmental Awareness Module completion statistics.
- Emergency preparedness and response - outcomes from incidents relevant to emergency preparedness and response.

4 RESPONSIBILITIES

4.1 Head of Health, Safety and Environment

- Implement the EMS.

4.2 Principal Environmental Specialist and Environmental Specialist

- Initiate appropriate review processes.
- Manage the audit schedule in consultation with the Environment and Stakeholder Business Partners.
- Coordinate the production of any environmental information and associated data.
- Develop, implement and maintain the Corporate EMS.
- Support implementation of the EMS across all sites.
- Review the Corporate EMS Manual and Procedures.

4.3 Environment and Stakeholder Business Partner

- Collect specific performance data.
- Review site environmental issues.
- Develop, implement and maintain the EMS for operational assets within the scope of the EMS.
- Review asset-specific environmental procedures.

4.4 Employees and Contractors

- Follow environmental procedures to ensure compliance with EMS requirements.

4.5 Internal Auditors

- Conduct internal audits as per audit schedule.
- Raise audit actions and recommendations.

5 REVIEW

The EMS Audit Program encompasses the checking of this document.

6 AUDITABLE OUTPUTS

The following items are outputs of this procedure:

- Environmental Audit Schedule.
- Audit Reports.
- Recommendations and actions logged into CGR Insight and subsequently closed-out.

7 DEFINITIONS

Term	Definition
EMS	Environmental Management System
CPM	Callide Power Management
LMS	Learning Management System
NPI	Act National Pollutant Inventory
NGERA	National Greenhouse Energy Reporting Act

8 REFERENCES

Reference No	Reference Title	Author
14031:2013	AS/NZS ISO 14031:2013 Environmental Management - Environmental Performance Evaluation - Guidelines	Australian Standards
B/D/11/31089	Procedure - CS-ENV-01 - Environmental Issue Identification	CS Energy
B/D/11/31090	Procedure - CS-ENV-02 - Developing Environmental Planning	CS Energy
B/D/11/31093	Procedure - CS-ENV-05 - Environmental Legal Compliance	CS Energy
B/D/11/31094	Procedure - CS-ENV-06 - Environmental Monitoring and Measurement	CS Energy
B/D/12/15420	Instruction - CS-ENV-10 - Environmental Internal Audit Guidance Manual	CS Energy
B/D/11/31098	Procedure - CS-ENV-11 - Environmental Management System Manual	CS Energy
B/D/11/45318	Procedure - CS-IM-01 - Learning from Incidents	CS Energy
B/D/12/3134	Procedure - CS-AUD-1 - Internal Audit	CS Energy
B/D/17/17691	EMS Internal Audit Schedule	CS Energy

9 RECORDS MANAGEMENT

In order to maintain continual improvement, suitability, safety and effectiveness of the organisation, registered documents will be reviewed on a two-yearly basis or at intervals specified by legislative or regulatory requirements. Review of controlled documents should occur where it has been identified that there are changes in technology, legislation, standards, regulation or where experience identifies the need for alteration to the content. Registered documents should also be reviewed following an incident, change management process, modification or where directed as part of a risk assessment process. A 'review' can simply mean that it has been identified, confirmed and appropriately recorded that no changes are required and that the existing process remains the same.

Government Owned Corporations must ensure that records are retained according to accountability, legal, administrative, financial, commercial and operational requirements and expectations. In compliance with records retention and disposal, all documentation created in relation to business must be retained in line with minimum retention periods as detailed in legal retention and disposal schedules.