



## CS ENERGY PROCEDURE FOR ENVIRONMENTAL AUDIT, REVIEW AND PERFORMANCE EVALUATION CS-ENV-07

Responsible Officer: Environmental Specialist  
 Responsible Manager: Head of Environment  
 Responsible Executive: Executive General Manager People and Safety

### DOCUMENT HISTORY

Key Changes	Prepared By	Checked By	Approved By	Date
Original Issue				27/01/1999
Updated responsibilities				17/05/2000
Expanded Section 3.1 re auditors. Section 3.5, added EMS review				03/07/2000
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Section 3.5 EMS Audit Program and EMS Review.				17/12/2001
Revision to Section 1, removal of reference to EMRO, Section 3.1 interval for legal compliance audits specified, Section 3.1 re managing results of audits, Section 3.2 to remove requirements for EMRO, Section 3.5 re factors driving review of issues, minor changes to titles, minor editing.				18/11/2002
Update content to reflect current processes and terminology.				25/11/2003
Section 3.5 – requirements for Management Review of EMS; Section 4 – Responsibilities – clarification of responsibilities, inclusion of responsibilities of Line Managers and employees; document owner				06/06/2005
Update to ISO 14001:2004, Section 3.4 wrt EPIs, Section 3.5 wrt scope of internal audit program, referencing of EMS Manual under EMS review and amendment to management review requirements; update organisational titles; include contractors in Section 4.4.				19/04/2006
EPA replaced with DERM; references to site-specific documentation removed, reference to SAP Routine, change Section 8 reference from CS MR-2 to CS MR-1				06/07/2009
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Updated to reflect current business processes and address internal EMS audit recommendations	S Harabasz	R Hartigan	T Wiltshire	22/01/2016



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## 1 PURPOSE

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

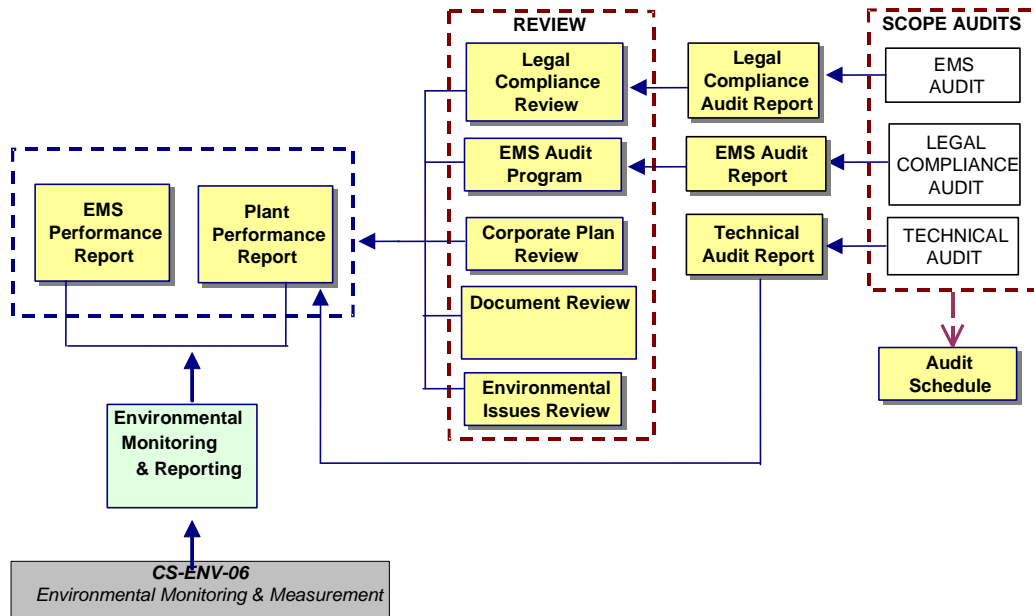


Figure EMSP-07: Environmental Audit Review and Performance Evaluation Flow Diagram.

## 2 SCOPE

This procedure applies to the performance of the Environmental Management System and business operations (plant 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 and targets.

## 3 ACTIONS

The instructions that follow focus on collecting information for measuring:

- EMS Performance; and
- Plant 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.

### 3.1 Environmental Auditing and Audit Reports

#### 3.1.1 Audit Scope

Three types of audits will be conducted at CS Energy sites:

- **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 (Refer 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 Internal Audit Schedule 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 entered into an audit schedule. The minimum content of the schedule is to be:

- Type of audit;
- Dates for audit - start and completion; and
- Staff involved.

#### 3.1.2 Auditor Requirements

*External Environmental Auditors* should have:

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

*Internal Environmental Auditors* should have:

- Relevant training in audit techniques and protocols; and
- 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 the Enterprise Risk Management System and risk assessed accordingly.

All audit reports are filed in TRIM and audit recommendations are managed through the Audit Actions Register in SAP.

### 3.2 Environmental Monitoring and Reporting Schedule

The Environmental Monitoring and Reporting Schedule involves the collation of information required for

producing reports and monitoring environmental performance and impact.

The process occurs at both the corporate and site level, and includes consideration of:

- Environmental approval monitoring and reporting requirements;
- 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);
- Requirement for external environmental reporting; and
- Internal reporting requirements e.g. monthly environmental report, quarterly business plan reviews.

The Information collated considers the requirements for monitoring and reporting:

- Operational plant performance (Refer to Section 3.3); and
- EMS and supporting management system performance (Refer to Section 3.4).

### **3.3 Plant Performance Reporting**

The main plant (operational) Environmental Performance Indicators (EPIs) that are measured relate to by-products of electricity generation e.g. contaminants such as NO<sub>x</sub>, particulates, oil, ash etc. These indicators are used to determine how the business operations are impacting on the environment.

Plant performance reporting includes measurement of indicators related to the plant or processes making up the business and indicators which are related to the condition of the environment which may be impacted upon.

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

- Environmental Issues Identification Procedure (CS-ENV-01).
- Environmental Planning Procedure (CS-ENV-02).
- Environmental Issues Review (Section 3.7 of this procedure).
- Environmental Auditing and Audit Reports Procedure (Section 3.1 of this procedure).
- AS/NZS ISO 14031:2013.

The following plant indicators should be considered:

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

### **3.4 EMS Performance Reporting**

Management performance indicators are used to measure how well the management system is functioning and identify areas for continual improvement. Reporting on the management system

performance is a function of the EMS audit and EPI information collected by management systems.

The following management EPIs could be considered:

- Number of internal EMS audits performed in reporting year;
- Number of external EMS audits performed in reporting year and number of major non-conformances;
- Number of incidents/complaints received and number outstanding;
- Percentage of actions from EMS audits entered into the Audit Action Register;
- Number of significant issues entered into the Risk Management System;
- 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; and/or
- Number of Environmental Issue Management Plans completed.

### **3.5 Conduct Reviews**

The following summarises 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 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; and
- Identify areas for continual improvement.

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

- Department of Environment and Heritage Protection (DEHP) environmental approval conditions;
- DEHP environmental approval annual return;
- Issues arising from Environmental Coordinator meetings;
- Issues arising from Management Review/Management Team/Workgroup Coordinators meetings;
- Issues identified from existing plant refurbishment/operations;
- Plant walkarounds;
- Plant/activity environmental audits;
- Status of any Environmental Issue Management Plans;
- Status of any Transitional Environmental Programmes (submitted to the DEHP);
- Requirements of any Operation and Maintenance Environmental Management Plans e.g. CPM Environmental Management Implementation Plan;
- Annual summary of risks, incidents, complaints;
- Changes to legislation or other requirements; and
- Relevant policy, goals and targets.

The review follows the Environmental Issues Identification procedure (CS-ENV-01).

Outcomes required:

- Risks in the Risk Management System are up to date; and
- Production of Environmental Issue Management Plans.

### **3.5.2 Environmental Management System Audit Program (Internal and External)**

The aim of these audits is to:

- Assess staff awareness of policy and goals;
- Determine the appropriateness of targets and the ability to achieve them;
- Alignment of system and documentation with ISO 14001:2004;
- Assess conformance with arrangements in the EMS; and

- Determine whether the EMS has been properly implemented and maintained through auditing operational controls.

Outcomes required:

- Audit reports; and
- Actioning of the audit findings and recommendations.

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

- Recent audit findings;
- Risks;
- High risk activities (e.g. overhauls); and
- Covering a range of the ISO 14001:2004 system elements each year.

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

### **3.5.3 Legal Compliance Review**

The aim of this review is to:

- Determine compliance with legal requirements by conducting a Legal Compliance audit;
- Ensure legal compliance audit findings are integrated with the Risk Review; and
- Ensure that the EMS Procedure CS-ENV-05 - Environmental Legal Compliance is being followed.

Outcomes required:

- Audit reports; and
- Actioning of the audit findings and recommendations.

Auditing will be conducted in accordance with Section 3.1 of this procedure and the EMS audit schedule.

### **3.5.4 Environmental Business Plan Review**

The Environmental Business Plan for each financial year for Corporate and Power Station Sites is reviewed for:

- Consistency with the CS Energy Environment Policy;
- Status of targets and goals;
- New targets and revised goals for the organisation / site.

Outcomes required:

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

Progress in delivering the Environment Corporate and Site Business Plans is reviewed quarterly as part





of the Quarterly Business Review process.

### **3.5.5 Environmental Management System Review**

Management review of the EMS, including review of processes performed by the organisation, is covered in Section 10.1 of the EMS Manual (CS-ENV-11).

The Head of Environment is responsible for development, implementation and maintenance of the EMS across all sites, and reviewing the Corporate EMS Manual and Procedures in consultation with Site Environmental Coordinators.

The Site Environmental Coordinators are responsible for site development, implementation and maintenance of the EMS and for reviewing site environmental procedures.

Management Review of the EMS shall be carried out by power station site and corporate office



management teams at planned intervals to ensure its continuing suitability, adequacy and effectiveness.

The 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 – findings from audits, reviews and evaluations
- Communications from External Parties including Complaints
- Environmental Performance of CS Energy in general including review of environmental monitoring results
- Performance Against Objectives and Targets – (see above item also) and their continuing suitability and implementation
- Corrective and Preventive Actions – status
- Changes to Legislation and Other Requirements affecting CS Energy environmental performance
- Improvement Initiatives for the EMS
- Outstanding Action Items - from previous Management Review Meetings

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

- Training and Awareness requirements; and
- Emergency Preparedness and Response - outcomes from incidents relevant to emergency preparedness and response.

## **4 RESPONSIBILITIES**

### **4.1 Line Managers**

- Implementation of the EMS in their areas of responsibility.

### **4.2 Head of Environment**

- Initiate appropriate review processes.
- Coordinate the production of any environmental information and associated data.
- Development, implementation and maintenance of Corporate EMS.
- Development and maintenance of EMS across all sites.
- Review of Corporate EMS Manual and Procedures.

### **4.3 Site Environmental Coordinator**

- Collection of specific performance data.
- Review of site environmental issues.
- Site development, implementation and maintenance of the EMS.
- Review of site environmental procedures.

### **4.4 Employees and Contractors**

- Following site procedures including Environmental procedures in accordance with the site EMS.

#### **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;
- Internal Audit Reports; and
- Recommendations logged into Audit Actions Register and subsequently closed-out.



## 7 DEFINITIONS

Term	Definition

## 8 REFERENCES

Reference No	Reference Title	Author
14031:2013	AS/NZS ISO 14031:2013 Environmental Management - Environmental Performance Evaluation - Guidelines	Aust Standards
<a href="#">"B/D/11/31089"</a>	Procedure - CS-ENV-01 - Environmental Issue Identification	CS Energy
<a href="#">"B/D/11/31090"</a>	Procedure - CS-ENV-02 - Developing Environmental Planning	CS Energy
<a href="#">"B/D/11/31093"</a>	Procedure - CS-ENV-05 - Environmental Legal Compliance	CS Energy
<a href="#">"B/D/11/31094"</a>	Procedure - CS-ENV-06 - Environmental Monitoring and Measurement	CS Energy
<a href="#">"B/D/12/15420"</a>	Procedure - CS-ENV-10 - Environmental Internal Audit Guidance Manual	CS Energy
<a href="#">"B/D/11/31098"</a>	Procedure - CS-ENV-11 - Environmental Management System Manual	CS Energy
<a href="#">"B/D/12/3134"</a>	Procedure - CS-AUD-1 - Internal Audit	CS Energy
	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 where it has been identified that there are changes in technology, legislation, standards, regulations 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.

CS Energy 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 CS Energy business must be retained in line with minimum retention periods as detailed in legal retention and disposal schedules.