



# **Environmental Management Systems Manual Overview**

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## 1.0 Introduction

SPARQ Solutions is an Information Technology and Telecommunications (IT&T) service provider to Ergon Energy and ENERGEX which officially launched on 1 July 2004. The company is jointly owned by ENERGEX and Ergon Energy, and has been built from the complementary strengths of the two organisations. SPARQ Solutions is strategically positioned to provide business benefits to its parent organisations and shareholders through the alignment of resources to develop IT&T capabilities and shared IT&T assets.

To be a responsible member of society, we need to make sure that we manage our operations in a way that minimises environmental impact. Not only is environmental management important from a social point of view, it is also becoming critical to the success of our business.

Having an Environmental Management System (EMS) ensures that we minimise the environmental impacts of our activities in order to be a sound business and a good corporate citizen.

## 2.0 Purpose of Manual

The purpose of this manual is to provide new and existing employees, contractors and external auditors with an understanding of SPARQ Solutions' EMS and its elements, and to provide direction to key system documents, including those services provided through a Service Level Agreement (SLA) by Ergon Energy.

This manual is not intended for everyday use by all employees. It is a reference tool that should be used when an employee / contractor needs to refer to how the EMS works.

## 3.0 Scope of Certification

This manual applies to the whole of SPARQ Solutions activities, including offices based in Brisbane, Cairns, Townsville, Mackay, Rockhampton, Maryborough, and Toowoomba.

The current scope of ISO14001 (2004) Certification applies to the environmental management of:

<p align="center"><b>“Provision of Information Technology and Telecommunications (IT&amp;T) to Ergon Energy and ENERGEX”</b></p>
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## 4.0 Environmental Policy

SPARQ Solutions maintains a stand alone Environmental Policy Statement. The purpose of the policy is to ensure that the aims and priorities of SPARQ Solutions senior management team for environmental management are clearly understood and documented. SPARQ's Environmental Policy sets the overall vision of the organisation in terms of environmental performance. It is regularly reviewed and revised to ensure that it is relevant to the organisation. The policy is signed by the Chief Executive Officer and endorsed by SPARQ Solutions Board.

### Key Documents

- [0221 SPARQ Solutions Environmental Policy Statement](#)

## 4.1 Communicating the Policy

SPARQ Solutions will ensure that its Environmental Policy is documented and communicated to its staff and all persons working for or on its behalf.

### Responsibilities

- SPARQ Solutions WHS&E Contacts will ensure that hard copies of the policy are displayed in regional offices;
- HR will ensure that the current policy is included in all induction presentations and that the environmental policy shall be provided to contractors before they commence work;
- The Environmental Management Representative will ensure that the current Policy is available on the Intranet Portal, and;
- Managers shall make the policy available to members of the public when requested.

## 4.2 Reviewing the Policy

The CEO shall conduct an annual review of the policy with senior management during the SPARQ Solutions Environmental Management System Review meeting, scheduled for April of each year (approximately).

Following each annual review, the CEO shall communicate the revised policy to employees if any changes have occurred.

## 5.0 Planning

The EMS is based around identifying the environmental risks associated with SPARQ Solutions' operations and developing strategies to mitigate these risks.

To manage environmental issues effectively we need to be aware of how our work can affect the environment and what the legislative and other requirements are. This information is used in business planning, in setting environmental objectives and targets and when planning our work.

Currently, there are three (3) environmental aspects relevant to SPARQ Solutions. These are:

- Environmental Management Governance
- Energy Usage
- Waste Management

## 5.1 Environmental Aspects and Impacts Process

SPARQ environmental aspects and impacts are identified using the following method, and recorded in the SPARQ WHSE Risk Register:

1. Identify all the activities, process and services relevant to SPARQ.
2. Identify associated aspects which have, or may potentially have, an environmental impact (positive or negative). Consider those that the organisation can control and those over which it can influence.
3. For each activity, process and service, identify the associated actual and potential impacts of the environmental aspects for normal operations, uncommon events, and incidents.

4. The environmental impacts are assessed for significance using:
  - frequency or probability of occurrence of the impact; and
  - severity of the impact, as per 008 SPARQ Risk Management Methodology.
5. Any environmental aspect:
  - with an inherent risk rating of Medium or higher, or
  - under control of SPARQ, and
  - related to SPARQ's environmental objectives and targets or legal obligations,

is defined as "Significant". The environmental aspects associated with identified significant environmental impacts are managed in this EMS.

6. For each activity with a significant aspect, the evidence / controls to mitigate the environmental impact are to be included in the register.
7. The residual risk rating is determined by considering the controls in place and their effectiveness. Any environmental aspect with a residual risk rating of "Medium" or above is managed in accordance with 008 SPARQ Risk Management Methodology.

The Register of Environmental Aspects and Impacts is reviewed and revised annually or as required when:

- SPARQ activities, processes or services change significantly; or
- SPARQ undertakes new activities, processes or services.

The review, and the outcome of the review, shall be documented.

### Responsibilities

- The SPARQ Solutions EMS Management Representative (EMR) will ensure that SPARQ's environmental aspects are reviewed at least annually.
- The EMR shall ensure that relevant representatives of SPARQ Business Units are involved in the review and maintenance of the WHSE Risk Register.
- The Management Team determines which of those aspects are considered significant prior to June and set objectives and targets and EIP's for the following financial year and documented in the WHSE Corporate Program. Discussions regarding significance are recorded in the Management Review minutes.
- Objectives and targets, and EIP's are maintained by the EMR and made available on the SPARQ Solutions Intranet site.
- The EMR maintains minutes and other records.

### Key Documents

- [SPARQ WHSE Risk Register](#)
- [WHSE Corporate Program](#)
- [0221 SPARQ Solutions Environmental Policy Statement](#)

## 5.2 Legislative and Other Requirements

It is fundamental to our principles, that in the course of conducting our business, we will endeavour to comply with laws, regulations and codes of practice. To achieve the objective of a compliant organisation, SPARQ Solutions utilises a Legal Compliance Framework which has been developed in accordance with AS 3806:1998. This framework includes a process to identify and have access to applicable legal and other requirements related to SPARQ Solutions' environmental aspects.

Process:

SPARQ Solutions' Risk and Governance Manager liaises with Ergon Energy's Legal and Compliance Group for legislation reviews and provision of reports on changes as per our Service Level Agreement. Informal methods such as newsletters and electronic legislative update services are also used.

Ergon Energy has established an environmental procedure for the purpose of identifying, accessing and communicating legal and other requirements that are applicable. Additional information is also available through legal publications.

### Responsibilities

- At least annually (normally in April) the EMR and Ergon Energy Environmental Manager will review the most current national, regional, provincial, state and local legal and other requirements as applicable to SPARQ Solutions.
- The EMR will maintain records of this review.
- SPARQ Solutions' Risk and Governance Manager liaises with Ergon Energy's Legal and Compliance group for legislation reviews and provision of reports on changes.
- The EMR, in consultation with the HR department, will ensure that any environmental requirements and / or changes are included within Induction material.

The main pieces of legislation currently identified that influence our business is:

#### *The Environmental Protection Act 1994*

*The Environmental Protection Act 1994 is the primary environmental legislation in Queensland that establishes a framework for environmental protection. Under this Act, (SPARQ Solutions) is required to obtain approvals and licenses for environmentally relevant activities.*

*Under the Act, there is a "general environmental duty" which applies to all people in Queensland. To fulfil this duty at work, every (SPARQ Solutions) employee and contractor must identify likely risks and impacts associated with their work, and take all reasonable and practicable measures to prevent and minimise harm.*

## 5.2.1 Other Requirements

No formal other requirements have been identified as applicable to SPARQ Solutions. In future some directives may apply as a result of State Purchasing Agreements. A 2006/07 EIP has been developed to look at applicability of European Union Directives regarding life cycle analysis of electronic and electrical parts.

## 5.3 Objectives and Targets

Objectives and targets allow SPARQ Solutions to improve the EMS and our environmental performance. SPARQ Solutions has business plan objectives to:

- maintain legal compliance;
- maintain ISO14001 certification;
- continue to raise employee awareness of environmental impacts and responsibilities such that >90% of employees and contractors are trained and assessed as competent;
- investigate waste streams relating to batteries, printer consumables and packaging;
- investigate current energy and resource efficiency in all sites.

SPARQ Solutions' Safety & Environment Coordinator, in conjunction with the EMR will maintain a register of its objectives and targets that take into account our:

- environmental policy;
- environmental aspects;
- legal and other requirements;
- environmental improvement opportunities;
- technological options, financial, operational and business requirements and;
- views of interested parties.

An Environmental Improvement Plan is developed for each objective/target. These plans will outline how objectives and targets will be achieved. They will include designation of responsible people, clear timeframes for actions, and necessary resource planning.

Objectives and targets are developed considering significant environmental aspects, technological options and financial, operational and business plans, and the views of interested parties. These are set by Management in an annual review of the system (normally in March/April).

### Responsibilities

- The Safety & Environment Coordinator will draft suitable Objectives and Targets / Environmental Improvement Plans in March, considering Policy, Significant Aspects, Legal, Stakeholder and other requirements.
- Management Review in April will endorse all objectives and targets.
- A register of significant environmental aspects, objectives and targets, and EIP's are maintained by the Safety & Environment Coordinator and made available on the SPARQ Solutions Intranet.
- The Safety & Environment Coordinator maintains minutes and other records.

### Key Documents

- [0558 Environmental Objectives and Targets](#)
- [WHSE Corporate Program](#).

## 6.0 Implementation and Operation

### 6.1 Roles and Responsibility

All SPARQ Solutions employees and contractors have a role in implementing the EMS and minimising the environmental impact of their work. In addition, there are roles within the organisation that have specific responsibility for elements of SPARQ Solutions' EMS.

SPARQ Solutions recognises that all staff, contractors and service providers have responsibility for their own conduct and therefore their impact on the environment.

Position / Role	Responsibilities
<b>Senior Management</b>	<ul style="list-style-type: none"> <li>• Environmental management within respective workgroups</li> <li>• Ensure the availability of necessary resources to implement and maintain the EMS.</li> <li>• Participation in Management Review meetings</li> </ul>
<b>Environmental Management Representative</b>	<ul style="list-style-type: none"> <li>• Management Representative responsible for reporting to senior management on performance of the EMS and its suitability.</li> </ul>
<b>Safety &amp; Environment Coordinator</b>	<ul style="list-style-type: none"> <li>• Develop, implement and monitor the Environmental Programs and Management System</li> </ul>
<b>Risk and Governance Manager</b>	<ul style="list-style-type: none"> <li>• To report and track environmental risk and audit actions in accordance with the SPARQ Solutions risk management framework.</li> </ul>
<b>Staff</b>	<ul style="list-style-type: none"> <li>• Must not carry out any activity that causes, or is likely to cause, environmental harm unless that person takes all reasonable and practicable measures to minimise the harm.</li> <li>• Undertake any environmental training as and when required.</li> <li>• Be aware of SPARQ Solutions' Environmental Policy.</li> <li>• Be aware of SPARQ Solutions' Environmental Aspects, in particular the Significant Aspects relevant to their work activities.</li> <li>• Work in accordance with the Environmental Management System documentation applicable to them (e.g. Environmental Improvement Plans).</li> <li>• Report and assist with the response and investigation of any environmental incidents.</li> <li>• Ensure that any equipment and materials necessary for environmental management are maintained in a fit for use condition.</li> </ul>
<b>Contractors and other people working on behalf of SPARQ Solutions</b>	<ul style="list-style-type: none"> <li>• Must not carry out any activity that causes, or is likely to cause, environmental harm unless that person takes all reasonable and practicable measures to minimise the harm.</li> <li>• Be aware of SPARQ Solutions' Environmental Policy.</li> <li>• Undertake any environmental training as and when required.</li> <li>• Be aware of SPARQ Solutions' Environmental Aspects, in particular the Significant Aspects relevant to their work activities.</li> <li>• Report any environmental incidents to SPARQ Solutions and assist with the response and investigation. Ensure that any equipment and materials necessary for environmental management are maintained in a fit for use condition.</li> </ul>

## 6.2 Training

One of the keys to ensuring a successful implementation of the EMS is the training of staff and contractors. This training is a means of increasing their awareness of the environmental policy, procedures and the requirements of the EMS, and their roles and responsibilities therein.

SPARQ Solutions, through training and development policies, will:

- ensure that any person performing tasks, for or on behalf of SPARQ Solutions, that have potential to cause significant environmental impact, are competent on the basis of appropriate education, training or experience;
- provide environmental awareness training and additional specific briefings and training as appropriate; and
- maintain training records in the relevant HR system.

Responsibilities:

- At least annually (normally in April) the Safety & Environment Coordinator in conjunction with the EMR will review the status of Environmental Training and forward any recommendation for inclusion at the Management Review.
- The Safety & Environment Coordinator will maintain records of this review.
- The Safety & Environment Coordinator, in consultation with the HR Department, will ensure that any environmental requirements and / or changes are included within Induction material, Awareness Modules and SPARQ Solutions Intranet site.
- The HR Department will ensure all records of Environmental Training on the Ellipse system.

## 6.3 Communication

Systematic and integrated environmental management requires communication between stakeholders. This includes stakeholders within the organisation (employees, different levels of management) and external stakeholders (regulators, customers, members of the community etc).

SPARQ Solutions will establish and maintain:

- internal communication within the organisation;
- receiving, documenting and responding to relevant communication from external interested parties.

SPARQ Solutions uses a range of mechanisms to communicate environmental information, for example:

- various monthly meetings across all levels and business units;
- bi-weekly and monthly eNews updates;
- SPARQ Solutions Intranet and Internet sites;
- SPARQ Solutions Safety Noticeboards.

## 6.4 EMS Documentation

This Manual identifies all documents relevant to the EMS. A copy of EMS documents, other than visual aids and records, can be obtained from the EMR or Safety & Environment Coordinator. Both Ergon Energy and SPARQ Solutions EMS procedures and forms are provided on the respective Intranet sites.

### [Key Documents](#)

- *All approved EMS documents are held on SPARQ Solutions Intranet site*

## 6.5 Document Control

SPARQ Solutions' documents are managed in line with document control procedures to ensure they are maintained and updated periodically. SPARQ Solutions ensures that there is a process to:

- approve documents for adequacy prior to use;
- review and update as necessary and re-approve documents;
- ensure that changes and the current revision status of documents are identified;
- ensure that relevant versions of applicable documents are available at point of use;
- ensure that documents remain legible and readily identifiable;
- ensure that documents of external origin are identified and distribution controlled; and
- prevent use of obsolete documents and if retained for specific purposes, suitably identify them.

Latest versions of the process documents are available on the Intranet.

The Environmental Policy is located

- on the Intranet under *Process Documents/SPARQ Solutions Corporate Policies*;
- on the WHS&E SharePoint site accessible via SPARQNet.

All other procedures and forms relating to the EMS are located

- on the Intranet under *Process Documents/Management and Administration / Environment*.

Procedures and work instructions for creating, updating and deletion of process documents are detailed

- on the SPARQ Solutions Intranet site under *Process Documents/Management and Administration/Update a Process Document*.

Responsibilities

- The SPARQ Document Controller will ensure adherence to established Process Documents Work Instructions and Procedures.
- The EMR approves all EMS documents.

## 6.6 Operational Control

Operational control procedures are necessary to ensure that all significant environmental aspects are being appropriately managed.

SPARQ Solutions integrates environmental requirements into its documentation. Where required, specific work instructions will be developed for activities that can cause a significant environmental impact.

To assist in the Operation Control, a number of Environmental Briefing Notes will be developed for referencing by SPARQ Solutions employees as a result of Environmental Improvement Plans.

These cover the significant aspects determined annually by the senior management team.

## Responsibilities

- The EMR is responsible for identifying operations and activities associated with significant environmental aspects that require operational controls in procedures, work practices or Environmental Improvement Plans.
- The EMR will determine the content and issue of any briefing notes.

## 6.7 Incident and Emergency Response

SPARQ Solutions supports a culture where all hazards, incidents and complaints are reported, actioned and monitored to reduce risk to the business. Although the EMS ensures that there are operational procedures in place to manage our most significant environmental risks, from time to time, incidents may occur that cause, or have the potential to:

- cause an environmental nuisance or harm;
- expose SPARQ Solutions to adverse publicity; and/or
- be politically sensitive.

Incident and hazard reporting is managed through the eSafe system and the SPARQNet Intranet site.

### Key Documents

- [0694 Report an Incident Work Instruction](#)
- [0695 Report a Hazard Work Instruction](#)

## 7.0 Checking

### 7.1 Monitoring and Measurement

Monitoring is an essential part of an EMS to ensure that the organisation is managing environmental issues in accordance with its EMS, environmental policy, and legal and other requirements.

SPARQ Solutions will monitor and assess its environmental performance through internal and external audits and monitoring of its environmental objectives and targets. Conformance with legislative and EMS requirements is also regularly monitored.

### 7.2 Evaluation of Compliance

Management reviews will be undertaken to regularly monitor environmental risks in accordance with the overall SPARQ Solutions Risk Management framework.

### 7.3 Non-Conformance, Corrective and Preventive Action

The term “non-conformance” refers to situations where the requirements of the EMS or relevant legislation have been breached. Corrective and preventive action is often required to mitigate the impacts of these non-conformances, and to ensure that non-conformances do not occur in the future. Corrective or preventive actions may also be implemented to avoid problems from actually occurring. This corrective or preventive action may involve modifying procedures, work instructions etc. Incident and hazard reporting is managed through the eSafe system and the SPARQNet Intranet site.

Results of Internal/External Audits and minutes will be tracked via the internal audit function i.e. via Risk and Governance Manager.

## 7.4 Records

Records are kept in line with the SPARQ's Record Management processes. EMS records are kept in accordance with the SPARQ Solutions filing systems, individual procedure or work instruction requirements.

Responsibilities:

- The SPARQ Solutions' Document Controller will ensure that updated registers are loaded onto the Intranet
- The EMR maintains minutes and other records.

## 7.5 EMS Audits

SPARQ Solutions will maintain an audit program to arrange for periodic system audits and report audit results to management in order to assess whether the EMS:

- has been properly implemented and maintained;
- conforms to planned environmental management arrangements including requirement of ISO14001;
- whether it has been effective in improving environmental performance and legislative compliance.

Auditors, internal or external to the organisation, can conduct audits. Reference is made to Ergon Energy's *Environmental Audit Procedures*, which specifies how audits should be conducted.

Responsibilities

- The EMR will annually develop the internal audit schedule (April) and submit to the Management Review and SPARQ Solutions' Safety Committee for acceptance.
- The EMR will ensure audits are undertaken on time
- EMR will ensure any actions are closed out in a timely manner
- The EMR maintains minutes and other audit records.

### Key Documents

- [WHSE Corporate Program.](#)
- [SPARQ Audit Issues Register.](#)

## 8.0 Review and Continuous Improvement

In order to continue maintaining our ISO14001 Certification, SPARQ Solutions must continuously improve its Environmental Management System. Information captured from audits and stakeholder feedback will highlight improvement opportunities.

Responsibilities

- Senior Management shall conduct an annual review of the entire EMS (March / April).
- Informal review process shall be incorporated into weekly scheduled Management Team meetings and coordinated by the EMR.
- The monthly Management Team meetings provide a forum for formal monitoring and reviewing of the EMS.

## 8.1 Scheduling the Annual Management Review

For the Annual Management Review to be effective, it should be as broad as possible, and cover all aspects of the EMS, including adequacy and effectiveness. Typical Agenda items include:

- results of internal and external audits;
- compliance evaluation of legal and other requirements;
- communication from external interested parties, including complaints;
- the organisation's environmental performance;
- the extent to which objective and targets have been met;
- setting targets for the forthcoming year;
- training identification needs;
- status of corrective and preventive actions;
- follow up actions from previous management reviews;
- consider changed circumstances, including legal and other requirements related to environmental aspects;
- improvement recommendation.

Based on this information, the Management Review will consider whether modifications to the EMS, Environmental Policy and / or objectives and targets are necessary.

### Responsibilities

- The EMR will set the date for the Management Review annually (normally in April).
- All Senior Department Managers are required to attend the Management Review Meetings.
- The EMR will prepare an agenda and draft all documentation and distribute prior to meeting.
- The EMR will maintain records of this review and retain a copy of all documentation relating to Management Review for the current year and the previous year.

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## 9.0 Definitions

SPARQ Solutions maintains both an Environmental Management System (EMS) and a Safety Management System (SMS). Due to the nature of our organisation's business there are often areas which overlap. To avoid duplication many of the environment and safety functions are run concurrently e.g. Annual Risk Assessment.

This appendix is to explain the correlation between SPARQ Solutions EMS and SMS terminology.

<b>AS/NZS ISO 14001 Environment</b>	<b>AS/NZS 4801 Safety</b>
<p><b>Aspect</b> Element of an organisation's activities, products or services that can interact with the environment.</p>	<p><b>Hazard</b> A source or a situation with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.</p>
<p><b>Impact</b> Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services.</p>	<p><b>Risk</b> (in relation to any potential injury or harm)  The likelihood and consequence of that injury or harm occurring.</p>