

1. Draft Environmental Management Plan

This document presents a series of environmental management plans (EMPs) for the Greenbank to Molendinar and Greenbank to Loganlea/Belmont transmission line projects, and the proposed Greenbank substation. An EMP has been formulated for each of the five proposed transmission line sectors (Sectors A to E) and for the proposed Greenbank substation. Individual EMPs have been developed as stand-alone documents in accordance with the project's initial advice statement, presented in Appendix A.

The EMPs set out the initial framework for implementing measures required to manage impacts identified in the draft environmental impact assessment review (EIAR). The EMPs will be developed further over a series of phases related to the timing of project development. A provisional timeline for the development of the EMPs is shown in Table 1.1.

It is envisaged that the EMPs will be refined after comment is received from government bodies, stakeholders and the public as part of finalising the draft report. The EMPs will again be updated when more detailed engineering design work has been completed, and footprint locations for structures and access track locations are known. The EMP will also be updated to reflect any statutory conditions placed on the various construction activities (e.g. environmentally relevant activities).

Table 1.1: EMP Development

Phase	Status	Provisional Timeline	Stage
1	Strategic	September 2000	Draft EIAR and EMPs
2	Strategic	July 2001	Final EIAR and EMPs
3	Design	2001–2002	Supplement to EIAR and EMPs: Location of access tracks / structure footprints
4	Implementation	2001–2003	Pre-construction, construction
5	Implementation	2003 onwards	Maintenance and operation

1.1 Purpose

The purpose of the EMPs is to ensure that the principles and objectives of the *National Strategy for Ecologically Sustainable Development* (1992) are incorporated into all phases of the development and operation of the project. More specifically, they will:

- provide evidence of practical and achievable plans for managing the project to ensure that environmental requirements are complied with, by providing an integrated planning framework for comprehensive monitoring and control of construction and operational impacts;

- provide relevant local, State and Commonwealth authorities with a framework to confirm compliance with policies and requirements; and
- provide the community with evidence that the project is being managed in an environmentally acceptable manner.

The EMPs identify potential environmental impacts and detail corrective action to be implemented if an undesirable impact occurs. Each EMP is structured as follows:

- the various *work plans* of construction are defined;
- the *operational policy* that applies to the work plan is described;
- the *performance criteria* for each work plan are stipulated;
- the *implementation strategies* to achieve the performance standards are nominated;
- the *monitoring and auditing procedure* to assess performance is described;
- the procedure for *reporting* of monitoring and auditing results is described; and
- the *corrective action* or choice of corrective actions is identified.

1.2 Environmental Management Structure

Environmental management in Powerlink Queensland is coordinated through the following structure.

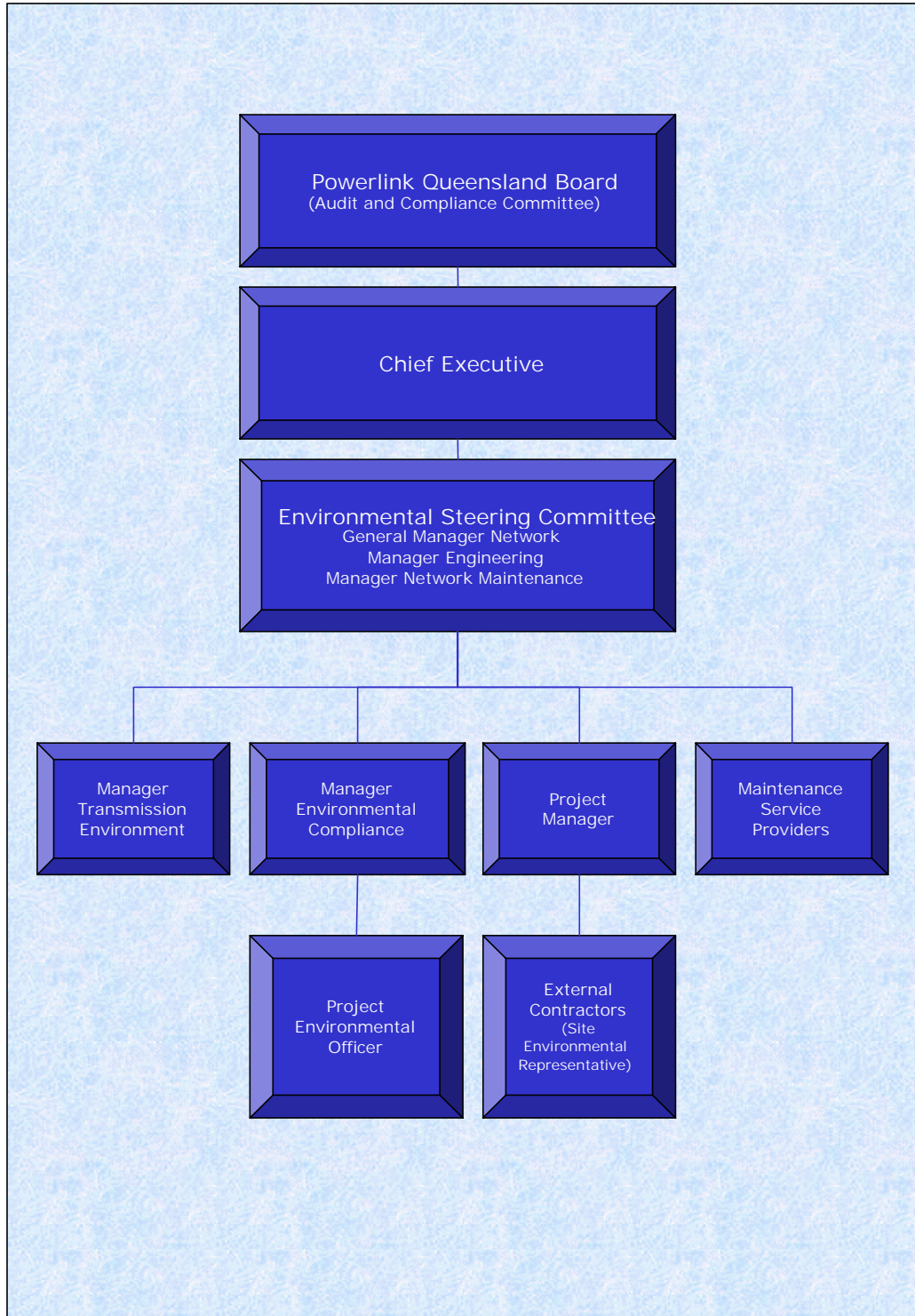


Figure 1.1: Environmental Management Structure — Powerlink Queensland

1.2.1 Executive Reporting

Powerlink's Chief Executive and Board are informed of the environmental performance of all projects undertaken by Powerlink through the Environmental Steering Committee. The Environmental Steering Committee reports to the Chief Executive and the Board through the Board's Audit and Compliance Committee.

1.2.2 Environmental Steering Committee

Powerlink's Environmental Steering Committee is the most senior management group within Powerlink with responsibility for overseeing the organisation's environmental performance. For this project, its membership includes:

- General Manager Network;
- Manager Engineering;
- Manager Network Maintenance; and
- Manager Environmental Compliance.

1.2.3 General Manager Network

The General Manager Network is Powerlink Queensland's Asset Manager. The Chief Executive nominates him as the executive with functional responsibility for the environmental performance of the organisation. He convenes the Environmental Steering Committee and defines requirements for environmental performance from service providers through the issuing of approved engineering standards, transmission maintenance policies, service level agreements, contract specifications or other documents as necessary.

1.2.4 Manager Transmission Environment

Reporting to the General Manager Network, the Manager Transmission Environment's group is responsible for the pre-construction activities of the project, including:

- selecting and securing the transmission line route;
- negotiating all easement acquisitions and land resumptions required by the project;
- conducting the environmental impact assessment/review of environmental factors; and
- preparing the project EMP.

1.2.5 Manager Environmental Compliance

Reporting to the General Manager Network, the Manager Environmental Compliance appoints a Project Environmental Officer for the duration of the project's construction phase to assist in and report on the implementation of the project EMP during the construction and commissioning stages of the project.

1.2.6 Project Manager

The Project Manager reports to the Manager Engineering, Powerlink Queensland's internal professional engineering service provider. The Project Manager is responsible for the construction and commissioning of the transmission line in accordance with the project objectives, including the project EMP.

Generally, construction of the line is carried out by a principal contractor to Powerlink who usually engages several subcontractors for different portions of the construction. The Project Manager is the Superintendent in relation to the Principal Contractor.

The Principal Contractor and all subcontractors are responsible for:

- conducting their activities in accordance with relevant legislative requirements, especially those of the *Environmental Protection Act 1994*;
- in particular, exercising a duty of environmental care and notifying the Project Manager of any environmental incident as required by the *Environmental Protection Act 1994*;
- obtaining any environmental authorities as required under the *Environmental Protection Act 1994* for any environmentally relevant activity for which they are wholly responsible;
- nominating a Site Environmental Representative with the authority to ensure that the project EMP is implemented with respect to any activity for which they are wholly responsible.

1.2.7 Manager Network Maintenance

The Manager Network Maintenance is an internal service provider within Powerlink Queensland, providing a field maintenance capability to the organisation. For this project, he is responsible for the ongoing post-construction maintenance and operation of the transmission line. He uses internal staff and external service providers to complete the variety of tasks for which he is responsible.

The Manager Network Maintenance is responsible for the implementation of the project EMP as it relates to post-construction activities. Any staff or service providers under his control must:

- conduct their activities in accordance with relevant legislative requirements, in particular those of the *Environmental Protection Act 1994*; and
- know the expectations of the project EMP with respect to any activity for which they are wholly responsible and have undergone the necessary training to meet the expectations of the plan.

1.3 Background to the Environmental Management Plan

1.3.1 Implementation

Powerlink Queensland is responsible for implementing the EMP for the whole project and ensuring compliance with the performance requirements in the EMP. Powerlink Queensland is also responsible for ensuring appropriate corrective action arising from a failure to meet stated performance requirements.

Powerlink Queensland will appoint a full-time Environmental Officer during construction who is independent of those who have direct responsibility for the works being performed. This officer will have the necessary authority and responsibility to ensure compliance with the EMP and monitoring performance requirements for each of the pre-construction and construction phases of the project.

Where contractual agreements are entered into for work associated with this project, Powerlink Queensland will:

- include the EMP in contract documents for all work to be undertaken by the Contractors; and
- ensure that all Contractors comply with the requirements of the EMP and nominate Environmental Site Representatives with the necessary authority.

1.3.2 Environmental Management Plans

Due to the different phases of construction of the transmission lines and substation, EMPs must be developed before any work commences.

An EMP will detail the exact nature of the work to be undertaken (e.g. vegetation removal) and the site-specific actions that will be used to minimise impacts (e.g. mechanical clearing or hand clearing). The following EMPs are to be prepared.

- Soil and Water Plan
- Vegetation Clearance Plan
- Landscaping Plan
- Emergency Response Contingency Plan
- Safety Plan

The EMPs will be produced by Powerlink or, if developed by a subcontractor, Powerlink will approve the EMP before implementation. In some cases (e.g. Nerang State Forest), these EMPs may require review by administering authorities to ensure the actions proposed are acceptable.

1.3.3 Legislative Requirements

These EMPs has been developed as a document that will undergo continual change in response to changes in environmental legislation and/or environmental management procedures and policies of the Principal or Contractor.

Powerlink Queensland is responsible for being aware of these changes and the requirement to update superseded legislation and policy.

The following legislation and standards should be used as the basis for decision-making and complaint resolution in respect of the EMP.

Table 1.2: Environmental Legislation, Policies and Standards Relevant to the Project

Issue	Standard
Construction — general	<ul style="list-style-type: none"> ▪ <i>Environmental Protection Act 1994</i> ▪ <i>Environmental Protection Regulation 1998</i> ▪ <i>Workplace Health and Safety Act 1995</i> ▪ <i>Workplace Health and Safety Regulation 1995</i>
Noise	<ul style="list-style-type: none"> ▪ Environmental Protection (Noise) Policy 1997 ▪ <i>Workplace Health and Safety Act 1995</i> ▪ AS 10551/2 — Acoustics — Description and Management of Environmental Noise ▪ AS 2436 — Guide to Noise Control on Construction, Maintenance and Demolition Sites
Air quality	<ul style="list-style-type: none"> ▪ Environmental Protection (Air) Policy 1997 ▪ National Health and Medical Research Council Guidelines, 1985 ▪ Draft National Environmental Protection Measures and Impact Statement for Ambient Air Quality, 1997
Water quality, and erosion and sedimentation control	<ul style="list-style-type: none"> ▪ Environmental Protection (Water) Policy 1997 ▪ Australian Water Quality Guidelines for Fresh and Marine Waters, ANZECC, 1992 ▪ <i>Water Act 2000</i> ▪ <i>Fisheries Act 1994</i> ▪ Soil and Water — Engineering Guidelines for Queensland Construction Sites — IE Aust, 1996
Contaminated land	<ul style="list-style-type: none"> ▪ <i>Environmental Protection Act 1994</i>
Storage and handling of dangerous goods	<ul style="list-style-type: none"> ▪ <i>Environmental Protection Act 1994</i> ▪ <i>Environmental Protection Regulation 1998</i> ▪ <i>Workplace Health and Safety Act 1995</i>
Transport of dangerous goods	<ul style="list-style-type: none"> ▪ <i>Road Transport Reform Act 1999</i> ▪ Australian Code for Transport of Dangerous Goods by Road and Rail
Waste management	<ul style="list-style-type: none"> ▪ Environmental Protection (Waste Management) Policy 2000 ▪ Environmental Protection (Waste Management) Regulation 2000 ▪ Waste Management Strategy for Queensland
Flora and fauna	<ul style="list-style-type: none"> ▪ <i>Nature Conservation Act 1992</i> ▪ <i>Nature Conservation Regulation 1994</i>
Cultural heritage	<ul style="list-style-type: none"> ▪ <i>Native Title Act 1993</i> ▪ <i>Native Title (Queensland) Act 1993</i> ▪ <i>Queensland Heritage Act 1992</i> ▪ <i>Queensland Heritage Regulation 1992</i>

Issue	Standard
Land use control	<ul style="list-style-type: none"> ▪ <i>Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987</i> ▪ <i>Integrated Planning Act 1997</i> ▪ <i>Rural Lands Protection Act 1985</i>
Electric and magnetic fields and corona noise	<ul style="list-style-type: none"> ▪ AS 10252 — 1989: Switches — For Rated Voltages of 52 kV and Above ▪ AS 29271 — 1989: Insulators — Porcelain and Glass for Overhead Powerlines — Voltages Greater than 1000 V ac — Test Methods

Before construction begins, Powerlink Queensland or contractors engaged by Powerlink will apply to the relevant government authorities to obtain permits, licences and approvals required before proceeding.

1.3.4 Review and Update

The EMPs will be reviewed as required to ensure that they address environmental issues and changes in legislation, policies and guidelines.

In particular, it is essential that the EMPs be refined once the positions of the footprints for tower/pole structures and locations for access tracks are known and further field assessments as part of the supplement to the EIAR has been undertaken.

1.3.5 Training Requirements

The EMPs will only be successful if all those responsible for their implementation and review are thoroughly conversant with their contents, interpretation and performance measurements.

Powerlink Queensland and its contractors will be responsible for ensuring that personnel working on the project have sufficient knowledge and awareness to identify potential environmental issues. Personnel should be trained in appropriate corrective action in the event that they become aware of an environmental issue.

It is important that all personnel are familiar with the procedures for reporting on issues that may result in environmental degradation. This includes identifying key personnel within Powerlink Queensland and relevant regulatory authorities. Environmental aspects of which clearing and construction contractors should be particularly aware, and where corrective action may be required, include:

- soil and water;
- noise and dust generation;
- identification of archaeological artefacts; and
- potential for spills of contaminants or hazardous substances.

1.3.6 Complaints Procedure

Stakeholders shall be consulted to ensure that disruptions to their operations, access or assets by construction or related activities are minimised. Stakeholders include property owners (freehold or leasehold), owners of infrastructure including roads, communication and utilities (e.g. gas), traditional owners and the general community.

A complaints procedure shall be established whereby all complaints received shall be recorded by the Environmental Officer. The Environmental Officer will be nominated as the initial point of contact and the name and contact details for this person will be advised to all affected landowners and will be available to the public through the Powerlink freecall number 1800 635 369.

All complaints received shall be investigated. An Environmental Complaints Register shall be established to log the details of a complaint, the action taken in response where necessary and any corrective actions or procedural changes implemented to prevent recurrence. The results of such investigation and actions taken shall be recorded and the initiator of the complaint advised.

Powerlink will provide details of all complaints, together with corrective actions, to the appropriate Administering Authority on a regular basis.

The Environmental Complaints Register will be reviewed daily by the Environmental Officer with any corrective action undertaken immediately. The Environmental Complaints Register will be regularly audited by either the Manager Environmental Compliance or the Project Manager to ensure adequate and timely response to any verified complaint.