Appendix D
Draft Environmental Management Plan
Galilee Basin Stage 2 TRANSMISSION LINE
Draft Environmental Management Plan

Built section/Functional Location: Galilee Basin Stage 2 Transmission Line

Version Date: October 2011
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>14 October 2011</td>
</tr>
<tr>
<td>Original Author</td>
<td>Powerlink</td>
</tr>
<tr>
<td>Objective Id:</td>
<td>Draft</td>
</tr>
<tr>
<td>Template Version number:</td>
<td>25/02/2011</td>
</tr>
</tbody>
</table>

**Documented change record:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Changes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/03/2011</td>
<td>Draft – GHD and Powerlink alteration based on Draft EIS</td>
</tr>
</tbody>
</table>

**Notes:**

1. Legislation referenced in this EMP can be found at:

2. Obj. ref: - is the document reference number for Powerlink's internal electronic document and record management system (eDRMS). The Powerlink eDRMS is called Objective.
Table of Contents

1 PURPOSE ...........................................................................................................................................................................5

2 POWERLINK’S MANAGEMENT STRUCTURE .............................................................................................................................6
  2.1 Preconstruction .........................................................................................................................................................6
  2.2 Construction ...............................................................................................................................................................7
  2.1 Operation and Maintenance ...............................................................................................................................................8

3 BACKGROUND TO THE ENVIRONMENTAL MANAGEMENT PLAN ........................................................................................9
  3.1 Implementation ...............................................................................................................................................................9
  3.2 Legislative Requirements ...............................................................................................................................................11
  3.5 Reporting and Records Procedure .................................................................................................................................16

5 ENVIRONMENTAL MANAGEMENT STRATEGIES .............................................................................................................22
  5.1 Contaminated Land .......................................................................................................................................................22
    5.1.1 Land Contamination ..................................................................................................................................................22
  5.2 Air Quality .......................................................................................................................................................................24
    5.2.1 Air Quality .................................................................................................................................................................24
    5.2.2 Noise and Vibration ..................................................................................................................................................27
    5.2.3 Electric and Magnetic Fields (Interference Considerations) ..................................................................................29
    5.2.4 Electric and Magnetic Fields (Health Considerations) ..........................................................................................31
  5.3 Biosecurity .......................................................................................................................................................................33
    5.3.1 Biosecurity .................................................................................................................................................................33
  5.4 Cultural Heritage ..............................................................................................................................................................35
    5.4.1 Cultural Heritage .........................................................................................................................................................35
  5.5 Wildlife ............................................................................................................................................................................37
    5.5.1 Wildlife .......................................................................................................................................................................37
5.6 Vegetation.................................................................................................................................................. 40
  5.6.1 Vegetation............................................................................................................................................. 40

5.7 Erosion and Sediment Control .................................................................................................................. 44
  5.7.1 Erosion and Sediment Control............................................................................................................. 44

5.8 Climate Change ....................................................................................................................................... 48
  5.8.1 Energy Use/ Greenhouse Gas ............................................................................................................. 48
  5.8.2 Sulphur Hexafluoride (SF6) ............................................................................................................. 50

5.9 Community ........................................................................................................................................... 51

5.10 Waste Management ............................................................................................................................... 55

5.11 Hazardous Materials ............................................................................................................................. 57

6 APPENDIX A – ENVIRONMENTAL POLICY ............................................................................................. 61
1 Purpose

The Galilee Basin Stage 2 Transmission Line Environmental Management Plan (EMP) provides an environmental management framework and procedures to avoid or minimise the actual and potential environmental impacts resulting from activities undertaken as part of the management of this asset.

This EMP covers activities carried out by Powerlink, its contractors or representatives only. Powerlink is not responsible for the activities in the project area (e.g. easement) of other parties (such as activities carried out by landholder or of other utilities).

The purpose of the EMP is to ensure:

- Effective and efficient environmental management is carried out through the construction and operation of the asset;
- Principles and objectives of the National Strategy for Ecologically Sustainable Development (1992) are incorporated into all phases of the project; and
- Compliance with relevant State and Commonwealth legislation.

It will provide:

- Evidence of practical and achievable plans for the management of the asset to ensure that environmental requirements are complied with, by providing an integrated planning framework for comprehensive monitoring and control of construction and operational impacts;
- Relevant local, state and Commonwealth authorities with a framework to confirm compliance with policies and requirements; and
- The community with evidence of the management of the asset in an environmentally acceptable manner.

This EMP contains:

- A description of Powerlink’s environmental management objective and policy;
- Details of Powerlink and other’s responsibilities; and
- Environmental aspects, including key performance objectives, management strategies and performance indicators of potential impacts from the proposed activities.

Powerlink assets generally have a minimum design life of 40 – 50 years, and significant changes to environmental management requirements, polices and legislation are expected during that period. As a result, the EMP will require updating from time to time during the life of the asset to maintain is currency and relevance. Updates may be triggered by changes in legislation, site activities, technology, information or community expectations (refer section 3.3).

This EMP has also been prepared to meet the Department of Environment and Resource Management’s (DERM) Guideline “Preparing environmental management plans” dated March 2003. The general requirements of ISO14000 suite of Environmental Management System Standards were also taken into consideration in the preparation of this Environmental Management Plan.

Implementation and management of this EMP will be in accordance with Powerlink’s internal EMP Management Process and Environmental Management System.
2. **Powerlink’s Management Structure**

Powerlink’s organisational structure for the preconstruction, construction and maintenance phases of the project are shown in Figures 1, 2 and 3.

### 2.1 Preconstruction

![Powerlink’s Environmental Management Structure – Preconstruction Phase](image)

**Figure 1: Powerlink’s Environmental Management Structure – Preconstruction Phase**
2.2 Construction

Figure 2: Powerlink’s Environmental Management Structure – Construction Phase
2.1 Operation and Maintenance

Figure 3: Powerlink’s Environmental Management Structure – Maintenance Phase

Powerlink is committed to carrying out its activities in an environmentally responsible manner and has integrated responsible environmental management into all its business activities (See Appendix A – Environmental Policy).
3  Background to the Environmental Management Plan

3.1  Implementation

Powerlink or its nominated contractors or representative are responsible for implementing the EMP for the whole project and ensuring compliance with the nominated requirements. Powerlink will also be responsible for ensuring appropriate corrective actions arising from a failure to meet stated performance requirements are implemented by themselves or a nominated contractor or representative.

Preconstruction

For projects which require planning approvals/designation, the responsibility for ensuring compliance with the EMP and monitoring performance requirements for the preconstruction phase of the project will initially be held by Network Property. Network Property will be responsible for communicating EMP requirements to design and other teams, where applicable to their involvement in the project.

When an Environmental Impact Assessment (EIA) is carried out to support an application for planning approval/designation, the preconstruction requirements of the EMP will be determined by this EIA in conjunction with other Powerlink standards.

Network Property will be responsible for handing over the requirements of the EMP to the construction project team, prior to the commencement of construction. During the handover, information on approvals/permits/licences, commitments and agreements will also be provided.

For projects on existing assets which do not trigger development approval/designation, the responsibility for the preconstruction aspects of the EMP will be decided by the Project Manager and communicated to the relevant stakeholders. The Project Manager will be responsible for ensuring EMP requirements are communicated to design and other teams, where applicable to their involvement in the project. Prior to commencement of a new project on an existing asset, a Review of Environmental Factors (REF) will be carried out in accordance with Powerlink’s processes. The preconstruction requirements for this EMP will flow from the REF and be carried out prior to the carrying out of any construction works.

Environmental Work Plans (EWPs) will also be prepared to assist in the implementation of this EMP. Information presented on the EWPs may include and not necessarily limited to:

- Vegetation communities;
- Clearing extents and methods;
- Access tracks;
- Areas of cultural significance;
- Significant environmental management measures;
- Land status (e.g. weed status, contaminated land status); and
- Special access requirements and controls.

The EWP preparation will be facilitated by the Powerlink Representative in conjunction with the relevant Project Manager.

Construction

Powerlink will appoint a Representative who will have the necessary authority and responsibility for ensuring compliance with the EIS and EMP through monitoring performance requirements for the construction phase of the asset.
Where contracts are entered into for work associated with this asset, Powerlink will:

- Include EMP requirements relevant to the work in contract documents for all work to be undertaken by contractors
- Induct the contractor in the requirements of the EMP and Powerlink’s expectations as per the training requirements in Section 3.4 of this EMP.
- Ensure that all contractors comply with the requirements of the EMP and appoint a suitably qualified and/or experienced staff with the necessary authority to implement the relevant requirements of the EMP.
- Ensure that the contractor prepares environmental management documentation, which demonstrates how the contractor will meet the requirements of this plan and submits to Powerlink prior to any works being carried out to ensure that it meets the requirements of the EMP and statutory obligations.
- Require the contractor to report non-conformances to the nominated Powerlink Representative within agreed timeframes and suitable corrective actions.
- Require the contractor to report on a monthly basis on the implementation of this EMP, including corrective and preventative actions from any incidents.
- Monitor and measure the performance of the contractor against the requirements of the EMP.

The Powerlink Representative will also be responsible for handing over the requirements of the EMP to those parts of the business responsible for maintenance and operation activities at the completion of construction. During the handover, information on approvals/permits/licences, commitments, ongoing management requirements and agreements will be provided.

At the end of the construction phase of the project, the Powerlink Representative will also prepare a report outlining how each of the policy, performance criteria and implementation strategies contained in this EMP were met during the construction phase of the project. The Powerlink Representative will also be responsible for documenting the implementation of this EMP, and ensuring that any records, reports or registers nominated in this EMP are prepared and filed in Powerlink’s electronic document management system (Objective). Spatial data and EWPs will be handed onto the Land Management Team Leader for inclusion into Powerlink’s geographical information systems (PQ Maps).

Should works be carried out by using a contractor, the roles and responsibilities of the Principal and Contractor will be outlined in the contract prepared and issued by the Principal.

**Operation and Maintenance**

Powerlink will appoint a suitably qualified Representative with the necessary authority and responsibility for ensuring compliance with the EMP and monitoring performance requirements for the operation and maintenance phase of the asset. This EMP will be used to manage all non-routine maintenance activities undertaken by Powerlink or a Powerlink appointed sub-contractor.

When undertaking routine activities, the implementation of Powerlink’s Environmental Management System will provide a basis for environmental compliance.

**Asset Removal or Replacement**

As the asset will have a minimum design life in the order of 40-50 years, specific measures relating to asset removal or replacement (e.g. specific handling and management of wastes from asset removal, specific reinstatement outcomes to meet stakeholder requirements, work methods and environmental controls for asset removal) have not been included in this EMP. Environmental regulations, our understanding of environmental impacts and community expectations will have changed over this length of time and will need to be considered as part of the review of environmental factors. EMP conditions may need to be modified based on the results of the REF. Specific work methods or instructions may also be prepared at that time to guide asset removal and replacement activities.
Any agreements, requirements or conditions relating to asset removal or replacement (e.g. conditions of a development approval) will be included in this Environmental Management Plan to ensure that such measures are not overlooked at the end of the asset’s life.

### 3.2 Legislative Requirements

A summary of the legislation and other applicable standards which establish the performance criteria for the environmental strategies can be found in Table 1.

#### Table 1

<table>
<thead>
<tr>
<th>Environmental Aspect</th>
<th>Legislative/standards cross-reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Electricity Act 1994</td>
</tr>
<tr>
<td></td>
<td>Electricity Regulation 2006</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection Act 1994</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection Regulation 2008</td>
</tr>
<tr>
<td></td>
<td>Workplace Health and Safety Act 1995</td>
</tr>
<tr>
<td></td>
<td>Workplace Health and Safety Regulation 2008</td>
</tr>
<tr>
<td></td>
<td>Sustainable Planning Act 2009</td>
</tr>
<tr>
<td>Acid Sulphate Soils</td>
<td>Queensland Acid Sulphate Soil Investigation Team (QASIT) Guidelines</td>
</tr>
<tr>
<td></td>
<td>State Planning Policy 2/02</td>
</tr>
<tr>
<td>Air Quality</td>
<td>Air Quality – Management and Control of Dust AM-PR-0917</td>
</tr>
<tr>
<td></td>
<td>Environment Protection Measures for Ambient Air Quality, National Environmental Protection Council</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection (Air) Policy 2008</td>
</tr>
<tr>
<td></td>
<td>Management and Monitoring of Construction and Maintenance Noise AM-PR-0940</td>
</tr>
<tr>
<td></td>
<td>Noise risk assessment methodology – Construction works AM-GL-1039</td>
</tr>
<tr>
<td>Cultural Heritage</td>
<td>Aboriginal and Torres Strait Islander Heritage Protection Act 1986</td>
</tr>
<tr>
<td></td>
<td>Aboriginal Cultural Heritage Act 2003</td>
</tr>
<tr>
<td></td>
<td>Australian Heritage Council (Consequential and Transitional Provisions) Act 2003</td>
</tr>
<tr>
<td></td>
<td>Australian Heritage Council Act 2003</td>
</tr>
<tr>
<td></td>
<td>Environment and Heritage Legislation Amendment Act (No. 1)2003</td>
</tr>
<tr>
<td></td>
<td>Environment Protection and Biodiversity Conservation Act 1999</td>
</tr>
<tr>
<td></td>
<td>Iconic Queensland Places Act 2008</td>
</tr>
<tr>
<td></td>
<td>Native Title (Queensland) Act 1993</td>
</tr>
<tr>
<td></td>
<td>Native Title Act 1993</td>
</tr>
<tr>
<td></td>
<td>Queensland Heritage Act 1992</td>
</tr>
<tr>
<td>Environmental Aspect</td>
<td>Legislative/standards cross-reference</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Erosion and Sediment Control</td>
<td>Australian and New Zealand Guidelines for Fresh and Marine Water Quality, ANZECC, 2000</td>
</tr>
<tr>
<td></td>
<td>Coastal protection and Management Act 2003</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection (Water) Policy 2009</td>
</tr>
<tr>
<td></td>
<td>Maintenance of Access Tracks, Powerlink Procedure AM-PR- 0035</td>
</tr>
<tr>
<td></td>
<td>Soil Erosion and Sediment Control – Powerlink Policy AM-POL- 0830</td>
</tr>
<tr>
<td></td>
<td>Water Act 2000</td>
</tr>
<tr>
<td>Wildlife and Vegetation</td>
<td>Agricultural Chemicals Distribution Control Act 1966</td>
</tr>
<tr>
<td></td>
<td>Animal Care and Protection Act 2001</td>
</tr>
<tr>
<td></td>
<td>Assessment of Hazardous Marginal Trees AM-PR-0855</td>
</tr>
<tr>
<td></td>
<td>Environment Protection and Biodiversity Conservation Act 1999</td>
</tr>
<tr>
<td></td>
<td>Fire and Rescue Service Act 1990</td>
</tr>
<tr>
<td></td>
<td>Fisheries Act 1994</td>
</tr>
<tr>
<td></td>
<td>Fisheries Regulation 2008</td>
</tr>
<tr>
<td></td>
<td>Forestry Act 1959</td>
</tr>
<tr>
<td></td>
<td>Great Barrier Marine Park Act 1975</td>
</tr>
<tr>
<td></td>
<td>Marine Parks Act 2004</td>
</tr>
<tr>
<td></td>
<td>Nature Conservation (Wildlife) Regulation 2006</td>
</tr>
<tr>
<td></td>
<td>Nature Conservation Act 1992</td>
</tr>
<tr>
<td></td>
<td>State Planning Policy2/ 10</td>
</tr>
<tr>
<td></td>
<td>Sustainable Planning Act 2009</td>
</tr>
<tr>
<td></td>
<td>Vegetation Control Standards, Powerlink Standard AM-STA-0834</td>
</tr>
<tr>
<td></td>
<td>Vegetation Management Act 1999</td>
</tr>
<tr>
<td></td>
<td>Vegetation Management for Transmission Corridors and Sites, Powerlink Policy AM-POL-0050</td>
</tr>
<tr>
<td></td>
<td>Vegetation Management Regulation 2000</td>
</tr>
<tr>
<td></td>
<td>Wet Tropics Management Plan 1998</td>
</tr>
<tr>
<td></td>
<td>Wet Tropics Heritage Protection and Management Act 1993</td>
</tr>
<tr>
<td>Land Contamination</td>
<td>Draft Guidelines for the Assessment and Management of Contaminated Land, May 1998</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>Environmental Protection (Noise) Policy 2008</td>
</tr>
<tr>
<td></td>
<td>AS 2436: 1981 – Guide to noise control on construction, maintenance and demolition sites</td>
</tr>
<tr>
<td></td>
<td>Noise Measurement Manual Department of Environment and Heritage 1995</td>
</tr>
<tr>
<td></td>
<td>AS 1055.1/2: 1997 – Acoustics – Description and management of environmental noise</td>
</tr>
</tbody>
</table>
Environmental Aspects | Legislative/Standards Cross-Reference
---|---
Carriage of Dangerous Goods by Road Act 1984
Carriage of Dangerous Goods by Road Regulation 1989
Dangerous Goods Safety Management Act 2001
Management of insulating and petroleum based liquid spills AM-POL-0076
Management, Transport and Disposal of Waste Insulating and Petroleum-Based Liquids (Regulated Wastes) AM-PR-0926

Biosecurity (Pest and Disease) | Biosecurity Management – Pest and Pathogen Control Measures AM-PR-0039
Fire Ant Management Plan AM-PR-0781
Land Protection (Pest and Stock Route Management) Act 2002
Pest Management Act 2001
Plant Protection Act 1989
Vehicle and equipment clean down AM-PR-0968

Traffic and Site Access | Queensland Department of Main Roads Manual for Uniform Traffic Control Device
Transport Operations (Road Use Management) Act 1995
Transport Infrastructure Act 1994

Environmental Protection (Waste Management) Regulation 2000
Waste Management Strategy for Queensland 1996

Designation, approvals, licences, permits or agreements may be required by legislation. Powerlink, where necessary, will ensure that any designations, approvals, licences, permits or agreements which apply to known works are obtained prior to these works being carried out. Where a contractor proposes to carry out any works requiring an approval, license, permit or agreement which has not previously been obtained, this should be obtained in consultation with Powerlink. Designation, approvals, licences, permits or agreements, which apply to the pre-construction, construction, operation and maintenance of this asset are outlined in Table 2 below:

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Type</th>
<th>Description</th>
<th>Application</th>
<th>Expiry</th>
<th>Objective IDs for additional information (e.g. copy of application)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Community Infrastructure Designation</td>
<td>Government Gazettal of CID</td>
<td>Whole of the asset</td>
<td>NA</td>
<td>A..... (EIS) B......Final Assessment Report (FAR)</td>
</tr>
<tr>
<td>2</td>
<td>Acquisition of Land Act 1967</td>
<td>Acquisition of freehold land for easement</td>
<td>All freehold lands for easement</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Agricultural Chemicals Distribution Control Act 1966</td>
<td>Controls ground and aerial spraying, spreading or dispersing of herbicides and agricultural chemicals</td>
<td>Use of herbicides and chemicals</td>
<td>Up to 3 years</td>
<td>Contractors to hold appropriate licences.</td>
</tr>
<tr>
<td>Appendix</td>
<td>Type</td>
<td>Description</td>
<td>Application</td>
<td>Expiry</td>
<td>Objective IDs for additional information (e.g. copy of application)</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Electricity Act 1994</td>
<td>Confers power of transmission entity to Powerlink</td>
<td>Provides legislative framework for construction and operation of the transmission line</td>
<td>NA</td>
<td>Life of project. Approval from Minister.</td>
</tr>
<tr>
<td>6</td>
<td>Fire and Rescue Service Act 1990</td>
<td>Vegetation disposal</td>
<td>Whole project</td>
<td>NA</td>
<td>Permit required for burning off from Queensland Fire and Rescue Service. Requirements dependent on nature of vegetation, location, Powerlink policies and landowner requirements.</td>
</tr>
<tr>
<td>7</td>
<td>Sustainable Planning Act 2009</td>
<td>Confers responsibility to Powerlink as an entity to be seen advancing the Act’s purpose in addressing ecological sustainability</td>
<td>Whole project</td>
<td>NA</td>
<td>Ministerial Designation approval</td>
</tr>
<tr>
<td>8</td>
<td>Land Protection (Pest and Stock Route Management) Act 2002</td>
<td>Control and management of declared plants and animals</td>
<td>Declared Category 2 and 3 weeds within the study alignment must be controlled</td>
<td>Life of project</td>
<td>No permit required, but compulsory obligation under Act to comply with management intent for each of the declared weed species categories.</td>
</tr>
<tr>
<td>9</td>
<td>Soil Conservation Act 1986</td>
<td>Disturbance of land within an area managed under a Soil Conservation Plan approved under the Act</td>
<td>Parts of study alignment that traverse soil conservation properties</td>
<td>NA</td>
<td>No part of the Study Alignment traverses an area that is subject to an approved Soil Conservation Plan.</td>
</tr>
<tr>
<td>10</td>
<td>Nature Conservation Act 1992</td>
<td>Powerlink may be required to: a) Clear or interfere with protected flora species, and b) Interfere with fauna under the Act</td>
<td>Disturbance on State land only of: • Fauna breeding places • Endangered, vulnerable or near threatened flora species</td>
<td>a) Up to 6 months for a Damage Mitigation Permit b) Up to 3 years for a Species Management Plan</td>
<td>Only required for clearing or impacts to breeding places that will occur on State land, or on land that is not designated for the purpose of electricity transmission.</td>
</tr>
<tr>
<td>11</td>
<td>Environmental Protection Act 1994</td>
<td>Where serious and material environmental harm is caused or threatened. ERA may be undertaken.</td>
<td>Whole of project • ERA construction activities • Regulate waste disposal (transformer) oil</td>
<td>NA</td>
<td>Implementation of self assessable ‘Duty of Care’ requirements under the Act. Obtaining approvals for any ERA that may be undertaken.</td>
</tr>
<tr>
<td>12</td>
<td>Workplace, Health and Safety Act 1995</td>
<td>To provide a safe workplace and ensure work practices minimise rise of injury, death or illness to workers and public</td>
<td>All workers to be involved for the whole duration of the project</td>
<td>Life of project</td>
<td>Compliance with Industry Codes of Practice</td>
</tr>
</tbody>
</table>
3.3 Review, Update and Continuous Improvement

The EMP and EWPs will be reviewed and updated as required by Powerlink to ensure that they address any changes in:

- Information or discoveries occurring after the preparation of the original EMP
- Site conditions or requirements
- Statutory requirements or community expectations
- Construction and/or operational activities, technology or equipment
- Powerlink guidelines, policies or procedures.

A review and update of the EMP will also be triggered by any work other than routine maintenance which may have an environmental impact not controlled through standard processes or the current EMP and will be justified by an EIA or REF as outlined in section 3.1 of this EMP.

The EMP and EWPs will also be reviewed at the completion of the planning phase and again at completion of the construction phase of the project. This review will ensure that the changes to the asset made during construction have been included in the EMP and that the document is fit for use during operation and maintenance. Maintaining the currency of the EMP after the construction phase is completed will be managed by Maintenance Service Providers, based on the any non-routine activities they are undertaking.

The review and update of the EMP and EWPs is to allow for a process of continuous improvement. Auditing of compliance and suitability of Powerlink’s EMP management processes will be the responsibility of the Manager of Environmental Strategies and any identified changes or deficiencies in the EMPs and EWPs should be promptly addressed and new revisions of the EMP/EWPs issued as necessary.

3.4 Training requirements

Training records will need to be maintained by Powerlink for its staff and management. Contractors working on behalf of Powerlink will have the obligation to maintain training records for their staff and sub-contractors.
Preconstruction Phase
The relevant Project Manager will be responsible for ensuring that all personnel working on the project during the preconstruction or planning phase of the project are aware of the requirements of the EMP. Where EMPs have not been prepared, for example during preliminary environmental investigations in the EIA and prior to finalisation of the EMP, the Project Manager will ensure that all working personnel follow Powerlink’s environmental management standards, policies, guidelines and codes, or other applicable legislative or industry standards.

Construction Phase
All construction personnel shall be required to participate in an environmental induction, prior to their commencement of work on site. Records of personnel who have completed the inductions will be maintained. This induction shall include:

- Awareness of the general environmental requirements for the project, including key site specific management measures;
- Knowledge of the roles and responsibilities of the various parties on site, including the key contacts for reporting and notifications;
- Training in appropriate corrective action in the event that they become aware of an environmental issue;
- Instruction on procedures and reporting on issues that may result in environmental degradation; and
- Awareness of cultural heritage (this may take the form of a separate induction and will be nominated in the cultural heritage requirements for the project).

During the construction phase, training records, including inductions, will be reviewed as part of routine compliance checks. The construction team shall be responsible for ensuring that all relevant Powerlink staff are adequately trained regarding the contents, interpretation, responsibilities and performance measures contained in this EMP, and that personnel working on the project have sufficient knowledge and awareness to identify unforeseen environmental issues.

Unless stated otherwise in the contract, the Principal Contractor will be responsible for ensuring that all site personnel are trained/inducted on the requirements of the EMP and the procedures outlined within the EMP and contractor’s environmental documentation, prior to site personnel carrying out any work.

Operation and Maintenance Phase
Powerlink will appoint an officer with the necessary authority and responsibility for ensuring relevant training is provided to field staff to ensure compliance with the EMP during the operation and maintenance phase of the asset. During the maintenance phase, the Manager Environmental Strategies will include a review of training records as part of the scope of Maintenance Service Provider audits.

3.5 Reporting and Records Procedure
All reporting requirements outlined as conditions in asset or construction based approvals/permits (Table 2 section 3.2), will be outlined under the reporting section for each environmental aspect along with any other reporting requirement for that aspect.

Preconstruction Phase
Network Property will be responsible for finalising the EMP prior to construction commencing. Network Property will also be responsible for ensuring that all approvals and permits required for planning approval are entered into table 2 and that all agreements or commitments are documented and handed to the construction team.
Construction Phase

All Powerlink and Contractor staff are required to report environmental issues or incidents to their direct Supervisor, who shall be responsible for reporting to the Powerlink representative for that project who will, in consultation with the construction team, be responsible for ensuring corrective and preventative measures have been developed, and subsequently reported.

During the construction phase, an environmental issues register will be established between the contractor and the Powerlink Representative to resolve any environmental, community relation or cultural heritage issues associated with the construction phase. Items in the register may include actions to rectify, observed non-conformances with the EMP or actions to prevent reoccurrences of a non-conformance.

Response to any environmental incident shall be carried out in accordance with the requirements of Powerlink’s Emergency Response Management Handbook where the Powerlink Representative deems necessary. This includes external reporting to the relevant Government Agencies (e.g. Department of Environment and Resource Management (State), Department of Natural Resources and Water (Federal), or relevant Local Authority) through the Manager Environmental Strategies.

Records of implementation of the EMP will also be completed during the construction phase. Non-conformance with the EMP will also be recorded and will include corrective actions to resolve these non-conformances. A monthly report will be prepared which, summarises the performance of construction activities, non-conformances with the EMP and corrective and preventative actions.

Other records and reports which will be prepared during the construction phase include, but not necessarily limited to:
- Landholder Consultation Records (esp. for clearing and access).
- Complaints Register
- Construction Close Out Records
- Any records pertaining to any approval, permit or licence

Completing and collating records associated with and the reporting of environmental, community relations and cultural heritage is the responsibility of the construction team.

Operation and Maintenance Phase

All staff shall report any non-conformances with this EMP to their direct Supervisor, who shall be responsible for reporting to their relevant Manager. The manager will be responsible for implementing initial mitigation measures, and subsequent internal monthly and quarterly reporting.

When necessary, the Manager, in consultation with Manager Environmental Strategies, will be responsible for implementing a response in accordance with the requirements of Powerlink’s Emergency Management Handbook. This includes external reporting to the relevant Government Agencies (e.g. Department of Environment and Resource Management (State), Department of Natural Resources and Water (Federal), or relevant Local Authority).

Inspections such as those required by AM-FM-0354 Maintenance of Concrete Pole Built Sections, AM-FM-0377 Maintenance of Steel Pole Built Sections, and others will also be carried out on a regular basis during the life of the asset.
Corporate Reporting Requirements and Performance Measurement

Powerlink has internal corporate environmental management reporting requirements. Such reports are provided to the Powerlink's Environmental Steering Committee, and include reporting of:

- Incidents across the whole of the business
- Performance of all projects being carried out by the business against the criteria outlined in the relevant EMPs
- Performance against Key Performance Indicators (KPIs)

Corporate reporting and performance management is used to assess success of corporate environmental management processes, standards, policies, guidelines and codes, and identify where focus should be given for whole of business continual improvement.

3.6 Complaints Procedure

Landowners, occupiers and the general community will be consulted to ensure that impacts or disruptions to their operations or infrastructure is minimised. Complaints received onsite or by the contractor must be reported verbally to Powerlink as soon as possible. A suitable register will be used to provide actions and timeframes to resolve complaints.

Media handling is to occur in accordance with the Media Policy in the Workplace Conduct for Powerlink Contractors.

Preconstruction Phase

Concerns of landholders during the preconstruction phase of the project will be recorded and actioned. Powerlink's Management of Property Contact Information will be followed and a Land Owner Action Request Spreadsheet will be established to record and document resolutions relevant to the concerns.

Any concerns which are identified as impacting on construction, operation or maintenance activities will also be documented and provided to the Powerlink Representative for the relevant phases.

Construction Phase

A complaints handling protocol will be established and managed by the Project Manager, with all complaints received to be investigated, and where necessary actions will be implemented to resolve reasonable and relevant complaints.

A Complaints Register shall be established, and the following details recorded in the event of a complaint:

- Time and date of the incident/complaint
- Nature of the incident/complaint
- Name of person receiving / investigating the complaint
- Type of communication (e.g. telephone, letter, in person)
- Name and contact details of complainant (if provided)
- Investigation and response undertaken
- Corrective action taken as a result of the incident/complaint investigation and
- Follow up with complainant
Powerlink Corporate Communications or Network Property will also, where necessary, assist in the resolution of complaints or feedback from Local, State or Commonwealth Government.

**Operation and Maintenance Phase**

A complaints procedure will be established and managed by Powerlink, with all legitimate complaints received investigated. A Complaints Register shall be established, consistent with the outline provided in section 3.6.

Powerlink Corporate Communications or Network Property will also, where necessary, assist in the resolution of complaints or feedback from Local, State or Commonwealth Government.
4 Environmental Aspects

Management of environmental risks associated with works during the construction of new assets, refurbishing existing assets and maintaining/operating existing assets is to be carried out in accordance with Powerlink’s procedure AM-PR-0045 Managing Environmental Risks. This Procedure establishes responsibility for ensuring that environmental impacts have been considered and evaluated at an appropriate level for all activities. This procedure should also be read in conjunction with AM–POL–0019 Environmental Compliance Whole of Life for Powerlink Assets and AM-PR-0304 Determining the Level of Environmental Assessment for Powerlink Activities.

4.1 Cultural Heritage

Powerlink resolves cultural heritage in accordance with the provisions and processes outlined in the Aboriginal Cultural Heritage Act 2003 and Queensland Heritage Act 1992. As a result, specific cultural heritage management measures relevant for an asset may be developed to protect cultural heritage. These specific cultural heritage management measures are presented in other plans and documents and will be issued by the Powerlink Cultural Heritage team prior to commencement of any construction, maintenance or operational activities that pose a risk to the cultural heritage.

4.2 Safety Management

Powerlink resolves safety in accordance with the provisions and processes outlined in the Work Place Health and Safety Act 1995 and associated regulations, standards and codes. The Electricity Act 1994 and Electrical Safety Act 2002 also have specific obligations that Powerlink must balance and consider when managing environmental impacts. Specific safety management measures and systems may exist relevant to an asset. Due to the consequences, safety threats will normally take precedence to environmental aspects where there any conflict in asset management principles.

4.3 Emergency Response Plans

Powerlink maintains processes to ensure any emergency event is coordinated across the business. This process is documented under the Corporate Emergency Management Handbook (CEMH) and it includes environmental incident management. A specific process for the Environmental and Cultural Heritage Emergency Management Plan AM-PR-0481 is linked to the CEMH.

4.4 Environmental Aspect Management

Management measures to mitigate potential impacts on environmental aspects identified for an asset have been prepared and are presented in Section 5.0 “Environmental Management Strategies”. Potential impacts associated with activities undertaken on or around this asset are identified in the Environmental Impact Statement/ Review of Environmental Factors, which is undertaken as part of the planning phase for a project.

During the construction, operational and maintenance phase of the project, there will be an ongoing process of monitoring; evaluation and review to enhance the Environmental Management Strategies to achieve continuous improvements in overall environmental performance in line with Powerlink’s environmental policy (refer to section 3.3).
4.5 Protected Areas

Powerlink Queensland has developed, in conjunction with the Department Environment and Resource Management, Ergon Energy and Energex, a code of practice for the Maintenance of Electricity Corridors in Queensland's Parks and Forests. The Protected Area Code of Practice (PFCP) will apply to the maintenance of assets within national parks forest reserves, recreation areas, State forests [excluding State plantation forests], timber reserves, Wet Tropics and other reserves in Queensland.

The code was developed to have agreed maintenance standards for assets within these areas, however, the principles will form a minimum standard for any further development of assets within these areas; as such, this EMP outlines some requirements for activities within a protected area. Powerlink has identified the PFCP as the higher level of management and should be applied if any conflict occurs with other management strategies outlined in the EMP.
5 Environmental Management Strategies

5.1 Contaminated Land

5.1.1 Land Contamination

5.1.1.1 Policy

- Compliance with the Environmental Protection Agency Draft Guidelines for the Assessment and Management of Contaminated Land and Powerlink’s AM-PR-0841 Identification and Management of Contaminated Land (Obj:A587980) and Corporate Emergency Management Handbook.

5.1.1.2 Performance Criteria

- No land added to the environmental management register contaminated land register without Environmental Strategies notification.
- No movement of contaminated material offsite without the relevant approval/permit/tracking.
- Compliance with Powerlink’s procedure AM-PR-0841 Identification and Management of Contaminated Land (Obj:A587980).

5.1.1.3 Preconstruction Phase

Implementation Strategy:

- Conduct a search of the Contaminated Land Register/Environmental Management Register (CLR/EMR) to determine any impacted properties.
- Check for evidence of contaminated sites (in particular cattle dips, mining or unofficial/unrecorded waste disposal sites). Undertake any investigations required, and identify any potential impacts that might arise from construction, maintenance or operation.
- Map any land parcels on the CLR/EMR and display them on the Environmental Work Plans.
- Assess works involving excavation in accordance with AM-GL-1043 Management of Contaminated Land.

Monitoring and Auditing:

- Not applicable to this phase

Reporting:

- Document any details of specific land management requirements for properties listed on the EMR/CLR.
- As per section 3.5.

Corrective Action:

- Not applicable to this phase

5.1.1.4 Construction Phase

Implementation Strategy:

- Check for any evidence of unofficial/unrecorded contaminated sites (in particular cattle dips, waste disposal sites, storage site, etc).
- If site investigations identify that contaminants are present, undertake further testing as required and use results to determine containment, remediation or removal requirements.
- Retain, wherever possible, any excavated contaminated soil or other earthen material on site and contain and bioremediate appropriately.
Obtain a Disposal Permit (issued by the DERM) where this is not practical and contaminated soil/material needs to be removed from the land parcel.

Cease work if potential land contamination is discovered (evidence to suggest potential contamination may be oil staining, buried waste or surrounding land-use). Work to only resume after appropriate site management measures are prepared and implemented.

Cease work, when activities or actions have the potential to cause land contamination.

Investigations of the nature, extent and source of the contamination may be required. This may include further control measures to manage contaminated materials.

Monitoring and Auditing:
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.

Corrective Action:
- Review and amend implementation strategies if necessary.
- Implement management strategies appropriate to the nature of the contamination where a discovery is made.

5.1.1.5 Operation and Maintenance Phase

Implementation Strategy:
- Search Powerlink’s PQ Maps and property register prior to the start of any soil disturbing activities to identify if the land is on the CLR or EMR.
- Carry out activities in accordance with Powerlink’s AM policy and procedure documents.
- Retain all spoil within the same lot from which it was removed where appropriate.
- Obtain necessary approvals/permits, should soil materials require removal from land on the CLR or EMR. Contact Powerlink Representative to arrange the necessary approvals/permits.
- Analysis of the soil (or other earthen material) may be required to enable an application for a disposal permit to be made.
- Cease work if potential land contamination is discovered (evidence to suggest potential contamination may be oil staining, buried waste or surrounding land-use). Work to resume only after appropriate site management measures are prepared and implemented.
- Cease work, when activities or actions have the potential to cause land contamination.
- Investigations of the nature, extent and source of the contamination may be required. This may include further control measures to manage contaminated materials.

Monitoring and Auditing:
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.

Reporting:
- Report any suspected land contamination to the Manager Environmental Strategies.
- Records for the management of contaminated soil e.g. disposal receipts/waste tracking records will be collated and kept by Powerlink.
- Spills with a cleanup costs greater than $5000 will be reported to the Manager Environmental Strategies.
- Summary of non-compliances, corrective actions and preventative actions to be recorded and available on request.
- As per section 3.5
Corrective Action:
   - Review and amend Implementation strategies if necessary.

5.2 Social Aspects

5.2.1 Air Quality

5.2.1.1 Policy
   - To prevent dust and other atmospheric emissions generated by preconstruction, construction, operation and maintenance activities from causing a hazard or nuisance.
   - To comply with the *Environmental Protection Act 1994* and *Environmental Protection (Air) Policy 2008*.

5.2.1.2 Performance Criteria
   - Compliance with the *Environmental Protection Regulation 2008* and *Environmental Protection (Air) Policy 2008*.
   - To maintain acceptable limits of vehicular and machinery operating emissions, including dust, associated with construction activities (i.e. both on-site and vehicles transporting materials to and from the site).
   - Compliance to *AM-PR-0917 Air Quality – Management and Control of Dust (Obj 596707)*.
   - No complaints regarding air quality or dust nuisance.

5.2.1.3 Preconstruction Phase

Implementation Strategy:
   - Restrict vehicle travelling speed (<40 km/h) on unsealed access tracks, where possible.
   - Identify potential water sources for dust suppression during the construction phase.
   - Obtain permits for water source extraction, where required.
   - Identify dust sensitive locations (e.g. residences, commercial spray shops etc) prior to construction activities occurring.

Monitoring and Auditing:
   - Undertake base line monitoring
   - As per section 3.5

Reporting:
   - Document any identified water sources and/or sensitive location.

Corrective Action:
   - Not applicable to this phase
5.2.1.4 Construction Phase

Implementation Strategy:

- Ensure that Powerlink notifies all adjacent landholders of the timing and sequence of Powerlink’s construction activities.
- Ensure that vehicles and machinery are fitted with appropriate exhaust systems and devices. Such devices will be maintained in good working order, in accordance with the manufacturer’s recommendations and the Commonwealth Department of Infrastructure, Transport, Regional Development and Local Government, Australian Design Rules for Vehicle Emissions.
- Minimise vehicles and equipment left idling.
- Apply dust suppressants or watering to work areas and access tracks on an as required basis to prevent dust nuisance.
- Restrict vehicles to approved access tracks and only those vehicles required for the safe, efficient and essential construction activities will be allowed in the work area.
- Cover all loose loads for transport to and from the work site.
- Install shaker grills at site access point and access tracks where required.
- Maintain sealed public roads free of trafficked soil materials. When required, sealed roads are to be swept regularly.
- Maintain stockpiles, for example stripped topsoil, in a condition which prevents windblown dust generation. This may include watering or covering of stockpiles.
- Limit bare earth exposure to that essential to the efficient and effective construction of the asset. Using vegetation cover, mulch covers or other suitable methods will be adopted where possible.
- Rehabilitate or allow natural regeneration of bare areas as soon as the area is no longer needed for construction.
- Restrict speed limits on off road access tracks to 40 km/h. Vehicle speeds will be further reduced on unsealed access tracks during dry, windy weather, to a speed whereby visible dust emanating from soil type interaction is minimised.
- Time dust generating activities in proximity to dust sensitive locations (e.g. residences or spray shop), when possible, to prevent dust nuisance at the sensitive receptors. Consideration shall be given to local site conditions, including soil type, rainfall, wind speed and direction, proximity to receptors and duration of the activity.
- Where practicable, locate access tracks away from dust sensitive locations to reduce likelihood of dust nuisance or complaint.
- Construct access tracks in proximity to dust sensitive locations and where there is a likelihood of dust nuisance, from materials which are more stable and less likely to turn to bull dust.
- Restrict, wherever possible, the burning of cleared vegetation. Cleared vegetation should be left in-situ (e.g. where appropriate to assist revegetation or erosion control), mulched and/or removed. If burning of cleared vegetation is planned, there is to be no burning of cleared vegetation to occur unless permitted by the local fire warden. Should burning of cleared vegetation be undertaken, permits for vegetation burning must be obtained and provided to the Easement Maintenance Manager prior to the burn. All conditions of any permit must be adhered to.

Monitoring and Auditing:

- All site personnel will monitor condition of access tracks and work areas, and report any areas where dust nuisance is likely to occur.
- Carry out regular visual surveillance of vehicles, plant and equipment working or moving within proximity to residences or other dust sensitive locations. The surveillance is to determine when actions are required to reduce potential dust nuisance.
- Quantitative monitoring may be conducted to investigate a complaint, if required by an administering authority, to determine if dust levels comply with the performance criteria specified in this EMP.
### Reporting:
- All complaints to be reported immediately to a Powerlink Representative and in writing within 24 hours.
- Summary of non-compliances, corrective actions and preventative actions to be recorded and available on request.
- Any air quality observations or test results to be presented in the monthly compliance report and available on request.
- Any material or serious environmental harm to be reported to the Manager Environmental Strategies.
- As per section 3.5.

### Corrective Action:
- If a dust complaint is received, investigate and provide advice on measures to reduce the likelihood of further complaints.
- Review of the implementation strategies will be carried out following any complaint to determine their adequacy, and whether additional measures need to be implemented. Where further measures need to be implemented, these will be added to the EMP/CEMP.
- Corrective and preventative actions will be implemented, on an as needed basis, to address dust nuisance.

#### 5.2.1.5 Operation and Maintenance Phase

**Implementation Strategy:**
- Carry out activities in accordance with Powerlink procedure AM-PR-0917 Air Quality – Management and Control of Dust (Obj:A587980).
- Maintain ground covers in accordance with surrounding land use and current groundcover vegetation levels.
- Restrict speed limits on off road access tracks to 40 km/h. Vehicle speeds will be further reduced on unsealed access tracks during dry, windy weather, to a speed whereby visible dust emanating from soil type interaction is minimised.
- Minimise vehicles and equipment left idling.
- Coordinate activities generating dust or other atmospheric emissions to coincide with favourable climatic conditions.

**Monitoring and Auditing:**
- All site personnel will monitor condition of access tracks and work areas, and report any areas where dust nuisance is likely to occur.
- Carry out regular visual surveillance of vehicles, plant and equipment working or moving within proximity to residences or other dust sensitive locations. The surveillance is to determine when actions are required to reduce potential dust nuisance.
- Quantitative monitoring may be conducted to investigate a complaint, if required by an administering authority, to determine if dust levels comply with the performance criteria specified in this EMP.

**Reporting:**
- Any dust related complaints will be reviewed quarterly and reported to the Asset Manager.
- Actions taken to mitigate dust nuisance and complaints to be recorded and reported on a monthly basis.
- As per section 3.5.

**Corrective Action:**
- Any dust complaints received will be investigated and steps taken to reduce impact (refer to Section 3.6 of this EMP).
- Corrective and preventative actions will be implemented, on an as needed basis, to address dust nuisance.
5.2.2 Noise and Vibration

5.2.2.1 Policy

- Compliance with the *Environmental Protection (Noise) Policy 2008*, Compliance with the *Environmental Protection Regulation 2008*.
- Compliance with Powerlink’s *AM-PR-0940 Management and Monitoring or Construction and Maintenance Noise* (Obj: A597278).

5.2.2.2 Performance Criteria

- All noise/vibration recorded as per section 3.6 of this EMP.
- Compliance with Powerlink’s *AM-PR-1940 Management and Monitoring or Construction and Maintenance Noise* (Obj:A597278).

5.2.2.3 Preconstruction Phase

**Implementation Strategy:**
- Appropriate standards of professional behaviour to be maintained at all times (e.g. no bad language or yelling).
- Operate vehicles in a manner which gives consideration to other road users and minimises the impact of traffic noise on potentially sensitive areas.
- Ensure assets are designed to reduce noise and nuisance and where possible with potential noise mitigation measures in place for future use.

**Monitoring and Auditing:**
- Undertake base line monitoring of noise, if required

**Reporting:**
- Document any identified sensitive location

**Corrective Action:**
- Not applicable to this phase.

5.2.2.4 Construction Phase

**Implementation Strategy:**
- Avoid undertaking noisy activities in close proximity to sensitive receptors, where possible.
- Notify all landholders adjacent to noisy activities of the timing and sequence of Powerlink’s construction activities.
- Ensure that machinery is fitted with appropriate noise attenuation devices, and will be maintained in accordance with manufacturer’s recommendations.
- Shut down any equipment generating loud, extraneous (unusual) noise until the source of the noise can be identified and rectified.
- Limit work hours to Monday to Saturday, during the hours of 6.30 am–6.30 pm. Work is not to occur outside these hours unless it is in an emergency, due to limited line outages or other exceptional circumstances.
- If work outside these hours is foreseen, the contractor is to notify Powerlink seven days prior to work occurring and a risk assessment is to be undertaken in line with AM-GL-1039. All work outside hours is to be approved by the Manager Environmental Strategies and the Manager Engineering. Nearest residents and other noise sensitive receptors will be notified of any works outside the normal construction hours, and appropriate actions to mitigate any stakeholder concerns will be implemented.
- Program loud noise activities to occur at times to minimise noise nuisance to surrounding residential areas. Physical noise barriers such as earth mounds or mobile screens should be used, where necessary.
<table>
<thead>
<tr>
<th>Monitoring and Auditing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>o General auditory observations (qualitative assessments) during site activities.</td>
</tr>
<tr>
<td>o Noise assessments (quantitative) only on direction from a statutory authority. These noise assessment will be carried out, where necessary, to investigate a complaint. The noise assessment will determine if noise nuisance has occurred, and will also identify measures to reduce the likelihood of further complaint.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Provide 7 days notification of any works outside of normal construction hours or the firing of a blast.</td>
</tr>
<tr>
<td>o All complaints to be reported immediately and in writing within 24 hours (as per section 3.6).</td>
</tr>
<tr>
<td>o Summary of complaints, non-compliances, corrective actions and preventative actions to be recorded and reported.</td>
</tr>
<tr>
<td>o As per section 3.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corrective Action:</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Investigate any noise complaints and implement measures, where practicable, to prevent the re-occurrence of a similar complaint. Noise measurement and monitoring may be required.</td>
</tr>
<tr>
<td>o Repair or modify defective or noisy equipment to comply with the above policy requirements.</td>
</tr>
</tbody>
</table>

### 5.2.2.5 Operation and Maintenance Phase

<table>
<thead>
<tr>
<th>Implementation Strategy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Avoid undertaking noisy activities in close proximity to sensitive receptors, where possible.</td>
</tr>
<tr>
<td>o Notify all landholders adjacent to noisy activities of the timing and sequence of Powerlink’s construction activities.</td>
</tr>
<tr>
<td>o Ensure that machinery is fitted with appropriate noise attenuation devices, and will be maintained in accordance with manufacturer’s recommendations.</td>
</tr>
<tr>
<td>o Shut down any equipment generating loud, extraneous (unusual) noise until the source of the noise can be identified and rectified.</td>
</tr>
<tr>
<td>o Limit work hours to Monday to Saturday, during the hours of 6.30 am–6.30 pm. Work is not to occur outside these hours unless it is in an emergency, due to limited line outages or other exceptional circumstances. All work outside hours is to be approved by the Manager Environmental Strategies and the Manager of the Maintenance Service Provider. Near residents and other noise sensitive receptors will be notified of any works outside the normal construction hours, and appropriate actions to mitigate any stakeholder concerns will be implemented.</td>
</tr>
<tr>
<td>o Program loud noise activities to occur at times to minimise noise nuisance to surrounding residential areas. Physical noise barriers such as earth mounds or mobile screens should be used, where necessary.</td>
</tr>
<tr>
<td>o Adjust reversing horns fitted to vehicles operating at night near noise sensitive receptors to a ‘buzzing’ sound with appropriate authorisation obtained from DTMR and WH&amp;S.</td>
</tr>
</tbody>
</table>
Deliver or remove materials and equipment to and from the site within the approved hours for construction. All transport vehicles will be in good working order and will avoid using exhaust brakes in built up areas, adjacent to the work site.

Ensure transport routes to and from the site are located, where possible, to limit the impact of traffic noise on potentially sensitive areas.

Carry out pre-work assessments to identify sensitive areas in proximity to blasting locations (e.g. cultural heritage sites and residences).

Design blasting, if carried out, so that the air blast overpressure and ground vibration at near noise sensitive places meets the criteria established in the Environmental Regulation 2008.

Ensure that any blasting to be carried out by a suitably experienced and qualified person (viz. a person with a shot firers licence issued under the Explosives Act 1999).

Implement measures to prevent ground vibration (such as delays), air blast overpressure and stemming ejection.

**Monitoring and Auditing:**
- General auditory observations (qualitative assessments) during site activities.
- Noise assessments (quantitative) only on direction from a statutory authority. These noise assessment will be carried out, where necessary, to investigate a complaint. The noise assessment will determine if noise nuisance has occurred, and will also identify measures to reduce the likelihood of further complaints.
- Reporting procedure outlined in Section 3.6 of this EMP.

**Reporting:**
- Any noise related complaints will be reviewed quarterly and reported to the Asset Manager.
- As per section 3.5

**Corrective Action:**
- Investigate any noise complaints and take steps to reduce impact. This may include a noise assessment if appropriate.

### 5.2.3 Electric and Magnetic Fields (Interference Considerations)

#### 5.2.3.1 Policy
- To minimise the potential interference caused by electric and magnetic fields at nearby residences or facilities by:
  - Appropriate separation distances between the asset and residences/airport facilities
  - Design to minimise interference effects (e.g. low surface voltage gradient on conductors, corona free support hardware, sectionalising, earthing).

#### 5.2.3.2 Performance Criteria
- No observable deterioration of radio or television signals received at nearby residences/airport facilities.
- No perceptible (i.e. nuisance) electric shock effects from nearby metal structures.
- No reasonable or relevant complaints in relation to EMF.
- Compliance with relevant local Aerodrome codes.
- No radio interference frequency discharge or emission within CASA radar bands.
5.2.3.3 Preconstruction

**Implementation Strategy:**
- Consider during the design stage of the project, appropriate separation distances from nearby residences/airport facilities to minimise potential increases in EMF interference.
- Design conductors, insulators, and hardware for minimal corona initiation.
- Identify any adjacent metal structures to determine whether precautionary measures are needed.
- Design all equipment to comply with both standards AS/NZ 2344-1997 “Limits of Electromagnetic Interference from Overhead AC Powerlines and High Voltage Equipment Installation in the Frequency Range 0.15 to 1000 MHz” and CISPR-ICE 18/1-18/3 “Radio Interference Characteristics of Overhead Powerlines and High Voltage Equipment.”

**Monitoring and Auditing:**
- Where landholders/airport authorities raise concerns in relation to EMF interference and occur within 500 m of the substation or new structure, carry out sample measurements of TV and radio air traffic communication reception and navigational signal reception quality prior to tower erection for comparison after the asset is energised.

**Reporting:**
- Record concerns of landholders/residents/airport authorities and provide information on the impact of the asset on background EMF.
- Report detailing measurements carried out.

**Corrective Action:**
- Determine appropriate corrective actions where there is a difference in TV or radio air traffic communication or navigational signals at a residence/airport facility between preconstruction and post-energising conditions.

5.2.3.4 Construction Phase

**Implementation Strategy:**
- Ensure that during construction / installation:
  - No burring or damage is caused to conductors or hardware.
  - All related hardware (e.g. domed nuts, corona rings etc.) is correctly installed.
  - Identify adjacent metal structures to determine whether precautionary measures (e.g. earthing) are needed. Install precautionary measures, such as earthing, as necessary.

**Monitoring and Auditing:**
- Random inspection of hardware and conductors.
- Random checking of adjacent metal structures for implemented precautionary measures.
- General surveillance for metal structures during routine inspections by the Powerlink Construction Manager or Inspectors.

**Reporting:**
- Any defects or damaged hardware or conductor are to be recorded routine inspections.
- NCRs are issued by the contractor in relation to defects or damage.

**Corrective Action:**
- Defective hardware or conductor is to be replaced or repaired to ensure compliance with the construction specification.
### 5.2.3.5 Operation and Maintenance Phase

**Implementation Strategy:**
- Identify newly installed metal structures to determine whether precautionary measures (e.g. earthing) are needed. Install precautionary measures, such as earthing, as necessary.
- Maintain the asset to reduce the likelihood of EMF interference.

**Monitoring and Auditing:**
- Monitor during routine inspections to confirm that precautionary measures (e.g. earthing) are installed at adjacent metal structures where an electric shock hazard could occur.
- Monitor for any unapproved co-use.
- Monitor for transient emissions with CASA radar band frequencies.

**Reporting:**
- Any potential hazards are to be recorded during routine inspections.
- Report any unapproved co-use to the Land Management Team Leader.
- Report on any EMF interference complaints after commissioning of the line to the resident EMF expert in Network Property.

**Corrective Action:**
- Implement precautionary measures, such as earthing, as required.
- Investigate EMF interference complaints and installed appropriate control measures, where necessary, to resolve the complaint.

### 5.2.4 Electric and Magnetic Fields (Health Considerations)

#### 5.2.4.1 Policy
- Prudent avoidance is to be adopted when determining transmission line routes and substation sites. This approach recommends that unnecessary exposure to electric and/or magnetic fields should be avoided if this is feasible in terms of both cost and technical considerations.
- Electric and magnetic field strengths for the proposed asset will be well below the exposure limits set down by the National Health and Medical Research Council for members of the general public.

---

The National Health and Medical Research Council (NHMRC) in 1989 issued interim guidelines for limitations of exposure to electric and magnetic fields (EMF), *Radiation Health Series No. 30 “Interim guidelines of exposure to 50/60 Hz electric and magnetic fields.”*. The NHMRC rescinded this publication in accordance with its policy of reviewing documents published more than 10 years ago. The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) has taken over responsibility of the review process for this publication.

In the absence of any other Australian guidelines, ARPANSA still refers to the NHMRC guidelines. In December 2006, ARPANSA released its own draft guidelines “Exposure Limits for Electric & Magnetic Fields – 0 Hz to 3 kHz” for public comment, with a final document expected in 2011. It is expected that the ARPANSA review, when finalised, will replace the NHMRC publication.
5.2.4.2 Performance Criteria

- EMF attributable to substation at nearby residences will not significantly increase the background EMF levels normally found in any home using electricity.
- Owners are informed and educated about the EMF/ health issue.
- No reasonable or relevant complaints in relation to EMF.

5.2.4.3 Preconstruction Phase

**Implementation Strategy:**
- Consider during the design stage of the project, appropriate separation distances from nearby residences to minimise potential increases in EMF levels.
- Configure phase conductors and circuits to produce the lowest possible EMF levels at the easement boundaries.
- Provide EMF information to owners and adjacent residents and / or conduct magnetic field readings on request.

**Monitoring and Auditing:**
- Lowest magnetic field configuration is to be verified by modelling
- On request, measure, to allay concerns of residents in proximity to the asset, EMF levels in and adjacent to residences before and after energising of the asset.

**Reporting:**
- A copy of any EMF readings taken or information sent to an owner is to be recorded in Objective.

**Corrective Action:**
- Advise and consult with affected property owners to implement corrective action acceptable to both parties.

5.2.4.4 Construction Phase

**Implementation Strategy:**
- Provide EMF information to owners and adjacent residents and / or conduct pre-energising and post-energising magnetic field readings on request.

**Monitoring and Auditing:**
- Not applicable to this phase

**Reporting:**
- Report on any EMF health concerns to the resident EMF expert in Network Property.

**Corrective Action:**
- Not applicable to this phase

5.2.4.5 Operation and Maintenance Phase

**Implementation Strategy:**
- As specified for the Construction phase of this EMP

**Monitoring and Auditing:**
- As specified in the Construction phase of this EMP

**Reporting:**
- As specified by Section 3.5
5.3 Biosecurity

5.3.1 Biosecurity

5.3.1.1 Policy

- No introduction, release, movement or transportation of red imported fire ants or other pest plants, animals and diseases declared under the Plant Protection Act 1989 or the Land Protection (Pests and Stock Route Management) Act 2002.
- Compliance with the Agricultural Chemicals Distribution Control Act 1996.
- Compliance with Powerlink’s AM-PR-0039 Biosecurity Management – Pest and Pathogen Control Measures (Obj: A513014) and AM-PR-0781 Fire Ant Management Plan (Obj: A582069).

5.3.1.2 Performance Criteria

- No new pest or disease outbreaks observed on the project area.
- Compliance with Powerlink’s AM-PR-0039 Biosecurity Management – Pest and Pathogen Control Measures (Obj: A513014) and AM-PR-0781 Fire Ant Management Plan (Obj: A582069).
- Powerlink’s Procedure AM-PR-0968 Biosecurity – Clean Down Site Selection Requirements (Obj: A782453).

5.3.1.3 Preconstruction Phase

**Implementation Strategy:**

- Identify properties which have been mapped as restricted or quarantined by Biosecurity Queensland.
- Implement AM-PR-0781 Fire Ant Management Plan (Obj: A582069).
- Implement any specific measures prescribed or nominated by Biosecurity Queensland in relation to the management of pests and diseases.
- Implement a pre-construction weed survey.
- Prepare, when required, pest/disease management plans for declared pests and diseases in restricted and quarantined areas in consultation with government agencies.
- Conduct an initial weed survey to identify any potential areas of concern and implement appropriate measures to prevent the spread of weeds.
- Undertake washdowns as per Department of Employment, Economic Development and Innovation “Queensland checklist for cleandown procedures”.
- Control existing infestations, where practical and to assist in reducing risks, prior to the commencement of construction activities.
- Develop a local weed management plan in conjunction with local and state government stakeholders.
- Select washdown type and location as per Powerlink’s AM-PR-0968 Biosecurity – Clean Down Site Selection Requirements (Obj: A782453).
- Where practical, implement procedures to allow construction to begin at properties that are free from weeds (mainly Parthenium) and finish with already infested properties.
**Monitoring and Auditing:**
- Monitoring for the presence of new outbreaks of pests and diseases.
- When required, monitoring will be conducted to ensure compliance with the Fire Ant Management Plan, weed management plan and any other specific requirements during entry, on and leaving properties.

**Reporting:**
- Report any suspected pest or disease outbreaks to the Manager Environmental Strategies.
- Record location of any pest or disease outbreaks.

**Corrective Action:**
- Any new outbreaks forward to the Land Management Team for inclusion into the Powerlink's PQ Maps.
- Develop management measures for new outbreaks.

### 5.3.1.4 Construction Phase

**Implementation Strategy:**
- Apply all requirement listed on any EWP developed for construction activities.
- Review land information databases prior to construction to determine current status of quarantined or restricted areas.
- Implement all pest/disease management plans.
- Construct washdowns as per AM-PR-0968 Biosecurity – Clean Down and Site Selection Requirements (Obj: A782453).
- Implement an approved Fire Ant Management Plan.
- Comply with property entry protocols.
- Undertake a post-construction week survey and, upon comparison with the pre-construction survey, identify where further mitigation measures are required.
- Herbicides or pesticides are not to be used on properties that are either certified organic pasture or are currently seeking certification.

**Monitoring and Auditing:**
- Monitoring will be conducted as outlined in the prepared management plans.
- Auditing will be conducted to ensure compliance with the Pest/Disease Management Plan.

**Reporting:**
- Report any suspected pest or disease outbreaks to the Manager Environmental Strategies.
- Record the location of and report any new outbreaks/infestations.
- Prepare and keep records required by the pest/disease management plan and section 3.5 of this EMP, including cleandown records.
- Summary of non-compliances, corrective actions and preventative actions to be recorded in the monthly compliance report.

**Corrective Action:**
- Information forwarded to the Land Management Team for inclusion into the Powerlink's PQ Maps.
- Update EWP's and pest/disease management plans for new outbreaks.
5.3.1.5 Operation and Maintenance Phase

**Implementation Strategy:**
- Develop and maintain strategies for the management of weeds including training in weed hygiene for all personnel.
- Train personnel on the identification of common weeds (pocket guides/P-LIST are available).
- Consult Sensitive Area Check and Property Hotspot Information (Powerlink’s PQ Maps) to identify known weed/pathogen contaminated properties.
- Undertake washdowns as per Department of Employment, Economic Development and Innovation *Queensland checklist for cleandown procedures.*
- Comply with property entry protocols.
- Provide signage for certified organic properties at all entrances to these properties accessed by Powerlink, with the approval of the landowner, instructing Powerlink staff and contractors that no sprays or chemicals to be brought onto the property.

**Monitoring and Auditing:**
- Monitoring will be conducted to ensure compliance with Powerlink’s AM-PR-0039 Biosecurity Management – Pest and Pathogen Control.

**Reporting:**
- Report any suspected pest or disease outbreaks for control/treatment.
- Record location of any pest or disease outbreaks.
- Prepare and keep records required by Powerlink’s AM-PR-0039 Biosecurity Management – Pest and Pathogen Control, including clean down records.

**Corrective Action:**
- Any new outbreaks forward to the Land Management Team for inclusion into the Powerlink’s PQ Maps.
- Update pest/disease management plans for new outbreaks.

5.4 Cultural Heritage

5.4.1 Cultural Heritage

5.4.1.1 Policy

- Compliance with the *Aboriginal Cultural Heritage Act 2003* and *Queensland Heritage Act 1992*.

5.4.1.2 Performance Criteria

- Provide effective recognition, protection and conservation of cultural heritage.
- Comply with all provisions of the signed Cultural Heritage Management Agreement between Powerlink and Traditional Owners.
### 5.4.1.3 Preconstruction Phase

**Implementation Strategy:**
- Contact Powerlink’s Cultural Heritage Team prior to carrying out any works, for the cultural heritage management measures which require implementation during the carrying out of such works.
- Development by Powerlink’s Cultural Heritage Team of management measures (refer section 4.1 of this EMP) which meet Powerlink’s obligations under the *Aboriginal Cultural Heritage Act 2003* and *Queensland Heritage Act 1992*.

**Monitoring and Auditing:**
- Refer to the preconstruction implementation strategy.

**Reporting:**
- Refer to the preconstruction implementation strategy.

**Corrective Action:**
- Refer to the preconstruction implementation strategy.

### 5.4.1.4 Construction Phase

**Implementation Strategy:**
- Refer to the cultural heritage requirements for construction phase of the project.

**Monitoring and Auditing:**
- Refer to the cultural heritage requirements for construction phase of the project.

**Reporting:**
- Refer to the cultural heritage requirements for construction phase of the project.

**Corrective Action:**
- Refer to the cultural heritage requirements for construction phase of the project.

### 5.4.1.5 Operation and Maintenance Phase

**Implementation Strategy:**
- Refer to the cultural heritage requirements for maintenance and operational phase of the project.

**Monitoring and Auditing:**
- Refer to the cultural heritage requirements for maintenance and operational phase of the project.

**Reporting:**
- Refer to the cultural heritage requirements for maintenance and operational phase of the project.

---

2 Note: Specific preconstruction, construction, maintenance and operation cultural heritage management measures are not included in this EMP as they may vary depending on the nature, intensity and location of any works. Contact must be made with Powerlink's Cultural Heritage Team to ascertain the management measures to be implemented for the proposed works. Such specific preconstruction, construction, maintenance and operation cultural heritage management measures issued by Powerlink's Cultural Heritage Team must be read and implemented in conjunction with the requirements of this EMP.
Corrective Action:
- Refer to the cultural heritage requirements for maintenance and operational phase of the project.

5.5 Wildlife

5.5.1 Wildlife

5.5.1.1 Policy
- To minimise the impacts on wildlife that are likely to arise from the construction, operation and maintenance activities
- Compliance with relevant legislation e.g. Nature Conservation Act 1992, Environmental Protection and Biodiversity Conservation Act 1999

5.5.1.2 Performance Criteria
- Compliance with Powerlink Species Management Program, any permit or other management conditions
- Investigate, monitor and report wildlife interactions
- No infringements with legislative requirements associated with wildlife

5.5.1.3 Preconstruction Phase

Implementation Strategy:
- Select position of assets to maximise habitat protection and minimise harm to wildlife
- Identify opportunities to provide habitat connectivity across the easement by positioning towers so that conductor height is raised sufficiently to allow vegetation to be retained where possible.
- Retain habitat/canopy trees where practical, ensuring the habitat/canopy trees will not impact on the safe and secure operation of the asset.
- Identify wildlife that is likely to occur in the area and are listed under the Environmental Protection and Biodiversity Conservation Act 1999 and the Nature Conservation Act 1992 and develop, where necessary, strategies to minimise impacts on such wildlife, taking into consideration any existing recovery plans.
- Obtain permits or specific Species management programs for species to which the Powerlink Species Management Program does not apply.
- Identify local wildlife carers and wildlife associations, who may be able to provide wildlife services if required.
- Identify any areas of significance which will require specific attention (areas of sensitivity), on the EWP.
- Identify koala habitat and avoid where possible. Establish mitigation measures where work is to occur in koala habitat area.
- Where necessary, develop strategies to compensate the loss the habitat (i.e. Rehabilitation Management Plan / Nest Box Management Plan)
- Identify where water crossings may need to be constructed and assess against code for fishway barrier works. Obtain any permits required outside of this code.

Monitoring and Auditing:
- Not applicable to this phase
Reporting:
  a. Record and report habitats to be protected or managed to minimise impacts.
  b. Reports required by the condition of an approval issued under the Environmental Protection and Biodiversity Conservation Act 1999 to be prepared.
  c. Notification required by code for fishway barrier works

Corrective Action:
  a. Not applicable to this phase

5.5.1.4 Construction Phase

Implementation Strategy:
  a. Induct all site personnel on importance of minimising impacts on native wildlife.
  b. Implement requirements of the EWP and this EMP.
  d. Obtain necessary permits and approvals for any other (non-program) nest or wildlife removals.
  e. Prohibit domestic pests and animals on the site during construction.
  f. Clearing to be undertaken in a staged and sequential manner.
  g. Identify habitat trees and colonial nesting/breeding sites within the project footprint (e.g. trees containing nests or hollows) using a suitably trained spotter catcher or ecologist. Measures to manage the habitat trees and/or colonial nesting/breeding sites are to be prepared and adopted, where practicable, to minimise wildlife impacts. If impacts to colonial nesting/breeding sites cannot be avoided, the appropriate permit must be obtained before disturbance occurs.
  h. Carry out clearing methods, on advice of the ecologist/spotter catcher to minimise harm to wildlife. For example, if the tree requiring removal is occupied by native wildlife, considerations should be given to leaving the tree in place until any juveniles present in the tree are fledged or have left hollows.
  i. If a Koala is identified within area to be cleared, the Koala is to be allowed to move off site on its own accord.
  j. Where necessary or specifically required, compensate for habitat loss by including nesting boxes or placing recovered hollows adjacent to cleared areas.
  k. Implement measures to recover and rehabilitate injured or orphaned native animals unavoidably impacted by clearing and construction activities.
  l. Construction works are to be limited to daylight hours. If in an emergency work is required after dusk, precautionary measures are to be implemented to avoid impacts on wildlife e.g. lower speed limits, lighting to be limited and directed away from habitat areas.
  m. Rehabilitate disturbance areas as soon as practical with native grasses, shrubs and powerline friendly vegetation (i.e. <4.5 m mature height) to provide connectivity and habitat resources.
  n. Significant habitats discovered during the construction phase managed in accordance with the EMP.
  o. Construct water crossings in accordance with code for fishway barrier works or other permit conditions.

Monitoring and Auditing:
  a. Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.
  b. Monitoring will be carried out in compliance with conditions of any approval issued under the Environmental Protection and Biodiversity Conservation Act 1999.
  c. Undertake post construction of all nest boxes to remove pest wildlife.
Reporting:
- In accordance with Section 3.5
- Reporting will be carried out in compliance with conditions of any approval issued under the *Environmental Protection and Biodiversity Conservation Act 1999*.
- Spotter Catcher/ecologist reports will be prepared documenting wildlife species identified during clearing and measures deployed to minimise impacts on the identified wildlife.
- Any nest or wildlife removals to be recorded in a register, in line with Powerlink Species Management Program.
- Summary of non-compliances, corrective actions and preventative actions to be recorded and reported.
- Notification required by code for fishway barrier works

Corrective Action:
- Corrective works for any damaged retained wildlife habitat / areas of sensitivity i.e. rehabilitation works.
- Review and amend implementation strategies if necessary
- New wildlife discoveries, such as listed under the *Environmental Protection and Biodiversity, Conservation Act 1999* or *Nature Conservation Act 1992*, reported to the Manager Environmental Strategies and appropriate management strategies prepared.

5.5.1.5 Operation and Maintenance Phase

Implementation Strategy:
- Obtain necessary permits and approvals for any other (non-program) nest or wildlife removals
- Maintain habitat connectivity where possible
- All lighting to be switched off when not in use
- Induct all personnel on importance of minimising impacts on native wildlife.
- Implement requirements of the EWP and this EMP
- No domestic pests and animals to be allowed on the site during construction.
- Clearing to be undertaken in a staged and sequential manner
- Identify habitat trees and colonial nesting/breeding sites within the project footprint (e.g. trees containing nests or hollows). Measures to manage the habitat trees and/or colonial nesting/breeding sites are to be prepared and adopted, where practicable, to minimise wildlife impacts. If impacts to colonial nesting/breeding sites cannot be avoided, the appropriate permit must be obtained before disturbance occurs.
- Avoid non-juvenile koala habitat trees during maintenance while allowing for the effective, efficient, safe and secure operation of the line.
- If non-juvenile koala habitat trees are to be disturbed, engage a spotter catcher to facilitate operations. If a Koala is identified within area to be cleared, the Koala is to be allowed to move off site on its own accord.
- Where necessary or specifically required, compensate for habitat loss by including nesting boxes or placing recovered hollows adjacent to cleared areas.
- Implement measures to recover and rehabilitate injured or orphaned native animals unavoidably impacted by clearing and construction activities.
- Significant habitats discovered during the construction phase managed in accordance with the EMP.
- Construct water crossings in accordance with code for fishway barrier works or other permit conditions.

Monitoring and Auditing:
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.
- Monitoring will be carried out in compliance with conditions of any approval issued under the *Environmental Protection and Biodiversity Conservation Act 1999*.
- Undertake post construction of all nest boxes to remove pest wildlife
### Reporting:
- In accordance with Section 3.5
- Reporting will be carried out in compliance with conditions of any approval issued under the *Environmental Protection and Biodiversity Conservation Act 1999*.
- Spotter Catcher/ecologist reports will be prepared documenting wildlife species identified during clearing and measures deployed to minimise impacts on the identified wildlife.
- Any nest or wildlife removals to be recorded in a register, in line with Powerlink Species Management Program.
- Notification required by code for fishway barrier works

### Corrective Action:
- Corrective works for any damaged retained wildlife habitat/areas of sensitivity i.e. rehabilitation works.
- Implementation strategies to be reviewed and amended where necessary.
- New wildlife discoveries, such as listed under the *Environmental Protection and Biodiversity Conservation Act 1999* or *Nature Conservation Act 1992*, reported to the Manager Environmental Strategies and appropriate management strategies for the wildlife discovery prepared.

### 5.6 Vegetation

#### 5.6.1 Vegetation

#### 5.6.1.1 Policy

#### 5.6.1.2 Performance Criteria
- Disturbance to flora is minimised, consistent with safe and reliable operation of the asset, and provision of access in accordance with standard Powerlink construction and maintenance requirements.
- Vegetation clearing is consistent with requirements of:
  - Powerlink’s AM-PR-0833 Routine Vegetation Management Note: Operation and Maintenance phase only
  - Powerlink’s AM-STA-0834 Powerlink Vegetation Control Standard
  - Powerlink’s AM-PR-0855 Assessment of Hazardous Marginal Trees
  - Powerlink’s Guideline for Activities in a Watercourse or Lake for Destroying up to 0.25 Ha of Vegetation, Excavating up to 500m3, and Placing up to 500m3 of Fill
5.6.1.3 Preconstruction Phase

**Implementation Strategy:**
- Prepare EWPs to show the proposed extent, methods of clearing and disposal. The EWPs will be compatible with/complement the Erosion and Sediment Control Plans and/or benching or site work plans. The clearing methods should consider information presented in the EIS/REF, the wishes of the landholder and the requirements of any EPBC approval. Clearing is to be carried out such that the impact on native wildlife, downstream water quality and surrounding land use is minimised.
- Identify vegetation communities/individuals listed under the *Environmental Protection and Biodiversity Conservation Act 1999* and develop, where necessary, strategies to minimise impact on such vegetation, taking into consideration any existing recovery plans.
- Conduct a complete desktop study and follow up visits to ensure all species of concern have been identified and are marked on the EWPs. (part of the EIS process)
- Limit the extent of clearing to that for the effective and efficient construction and maintenance activities, as well as the safe and secure operation of the line.
- Advise landholders of the nature and extent of clearing. Landowners or managers should be consulted regarding appropriate clearing and disposal techniques. Approval for herbicide application for regrowth will also be sought from the landholders.
- Dependent upon final surveys, vary tower height and placement to utilise spanning to minimise impacts upon flora values. The EIS recommended taller towers:
  - To span approx. 7 km of ironbark woodland between bends 17 and 18 (through Zig Zag Range);
  - Situated at bend point 19 to avoid of concern regional ecosystems; and
  - Between bend points 20 and 21; 18 and 19; 24 and 25; 25 and Surbiton Hill Substation.
- Undertake a preconstruction survey of tower footprint areas for grass species of conservation significance (Lilyvale Substation to the Gregory Highway).
- Where spanning of Brigalow or woodlands between bend points 15 and 18 is not possible and clearing is required, a survey for species of conservation significance should be undertaken.

**Monitoring and Auditing:**
- Not applicable to this phase.

**Reporting:**
- Record and report habitats to be protected or managed to minimise impacts.
- Reports required by the condition of an approval issued under the *Environmental Protection and Biodiversity Conservation Act 1999* to be prepared.

**Corrective Action:**
- Not applicable to this phase

5.6.1.4 Construction Phase

**Implementation Strategy:**
- Implement the requirements of the EWPs which detail the extent of clearing, clearing methods and other requirements.
- Prohibit unauthorised clearing.
- Implement protected plant exemption conditions for any work not on a designated easement.
- Limit clearing to areas identified in the EWP. These areas shall be identified and marked appropriately on site to ensure that disturbance will not occur in unauthorised areas. The extent of clearing (work area) shall be clearly marked on site using high visibility barriers or taping to ensure that clearing shall not occur in areas to be preserved. The marked up limits of clearing shall be maintained for at least the duration of clearing and earthworks.
- Vegetation clearing to be conducted in a staged approach so that the minimum area of ground is exposed at any one time. Vegetation is to be retained until its removal is necessary.
Carry out clearing activities in and within 50 metres of a watercourse in accordance with the Powerlink Guideline for Activities in a Watercourse or Lake for Destroying up to 0.25 Ha of Vegetation, Excavating up to 500m³, and Placing up to 500m³ of Fill (Obj: A471789).

During clearing activities do not allow felled timber and vegetation waste to be left near watercourse where it could cause an obstruction.

Minimise, where practicable, soil disturbance in high erosion prone and steeply sloping areas during clearing activities.

Limit access to the approved access tracks (detailed in the EWPs and agreed with landholders). Note: additional access may be required during stringing or for emergency purposes and such additional access is to be approved by the landholder.

Avoid disturbance of vegetation known to provide native wildlife with habitat of significance. Where clearing of significant habitat or habitat trees (e.g. trees containing nests or hollows) is necessary, native species of wildlife should be flushed or removed prior to or during clearing by a suitably trained person such as a spotter catcher, ecologist.

Progress clearing activities in a manner that allows opportunities for wildlife to vacate the affected area.

Salvage, where practicable, timber of economic value (e.g. millable, fencing or landscaping). Any other timber waste may be mulched or retained onsite as microhabitat.

Maintain or establish vegetation cover in areas subject to soil erosion. Where practicable, minimise soil disturbance in areas of high soil erosion potential.

Restrict the burning of cleared vegetation unless permitted by the local fire warden and local council. Should burning of cleared vegetation be undertaken, permits for vegetation burning must be obtained and provided to Powerlink prior to the burn.

Prohibit open fires on the project other than those allowed for in this EMP.

Prohibit the storage, parking or movement of vehicles, plant and equipment beyond the areas approved for clearing or have been cleared.

Temporary storage of plant and equipment is only to occur within the work area, unless otherwise approved by Powerlink/landholder.

Induct all site personnel, on clearing methods and vegetation marking protocols. Work areas will also be clearly defined in the induction.

Prepare a rehabilitation or reinstatement plan to guide reinstatement/rehabilitation to close out construction activities.

Revegetation (grassing etc) shall be encouraged on non-work areas as required. Batters of tower sites are to be revegetated/allowed to naturally regenerate on completion of pad development activities.

Implement the local weed management plan.

Promote where possible on the completion of construction activities, natural regeneration. Suppress weed growth as the preferred method of initial site rehabilitation. Revegetation may be used where the likely success of natural regeneration is limited.

Rehabilitation of sites may involve the respreading of stockpiled topsoil (and grassing etc) where applicable, to establish cover.

**Monitoring and Auditing:**

- Monitoring will be carried out in compliance with conditions of any approval issued under the Environmental Protection and Biodiversity Conservation Act 1999.
- Construction activities will be monitored to ensure compliance with the performance requirements as specified in the EMP or as frequently as necessary.
- Extent of clearing marked up prior to the commencement of works.
- Inductions register.
- Any unauthorised works beyond the extent of clearing barriers.
- Records of Wildlife Inspections and removal/relocation.
- Monitoring movements of vehicles, plant and equipment onsite.
Reporting:
  o In accordance with Section 3.5
  o Reporting will be carried out in compliance with conditions of any approval issued under the Environmental Protection and Biodiversity Conservation Act 1999.
  o Any protected plant removals not on a designated easement to be recorded in a register, in line with Protected Plant exemption.
  o Clearing consultation records are to be prepared.
  o Summary of non-compliances, corrective actions and preventative actions to recorded in the monthly compliance report.

Corrective Action:
  o Review and amend implementation strategies as necessary.
  o Corrective actions shall be developed in consultation with Powerlink where any unauthorised clearing has occurred.
  o Install fencing/bunting and signage to prevent re-occurrence of off access or work area movements or damage.
  o New flora discoveries, such as listed under the Environmental Protection and Biodiversity Conservation Act 1999 or Nature Conservation Act 1992, reported to the Manager Environmental Strategies and appropriate management strategies for the wildlife discovery prepared.

5.6.1.5 Operation and Maintenance Phase

Implementation Strategy:
  o Develop and implement a project EWP.
  o Carry out a sensitive area check to establish any special vegetation management requirements.
  o Implement protected plant exemption conditions for any work not on a designated easement.
  o Carry all maintenance activities in accordance with:
    o Powerlink's AM-PR-0833 Routine Vegetation Management  Note: Operation and Maintenance phase only
    o Powerlink's AM-STA-0834 Powerlink Vegetation Control Standard
    o Powerlink's AM-PR-0855 Assessment of Hazardous Marginal Trees
    o Powerlink's Guideline for Activities in a Watercourse or Lake for Destroying up to 0.25 Ha of Vegetation, Excavating up to 500m³, and Placing up to 500m³ of Fill
    o Advise landholders of the nature and extent of clearing. Landowners or managers should be consulted regarding appropriate clearing and disposal techniques.
      Approval for herbicide application for regrowth will also be sought from the landholders.
    o Implement the local weed management plan (refer to the Weed Management Environmental Strategy).
    o Identify habitat trees (e.g. trees containing nests or hollows) using a suitably trained person. Inspect these trees immediately prior to clearing and adopt, where practicable, measures to minimise wildlife impacts.
    o All required permits to be obtained before clearing is undertaken
    o Consider other requirements outlined in the construction phase of this environmental strategy, and implement where necessary.
    o Restrict the number of trees to be removed to the absolute minimum required to allow safe operation of the asset.
    o Retain shrubs less than 4m and groundcover vegetation. Trees are to be lopped instead of complete removal, where possible.
    o Retain vegetation that does not interfere with the electrical safety zone.

Monitoring and Auditing:
  o Vegetation management activities will be monitored to ensure compliance with the performance criteria as specified in this EMP and the EWP
5.7 Erosion and Sediment Control

5.7.1 Erosion and Sediment Control

5.7.1.1 Policy:
- All Erosion and sediment control to be consistent with IECA Best Practice Erosion and Sediment Control Guidelines 2008.

5.7.1.2 Performance Criteria
- All sites are stable with no uncontrolled sediment leaving the work site.
- No new tunnel and gully erosion resulting from Powerlink's activities within and adjacent to the project area.
- No deterioration in water quality in creeks or drainage lines caused by erosion from the project area.
- No release of untreated water to roadside gutter, stormwater drain or to water.
- Suitable vegetative cover or erosion and sediment controls in work areas.
- Compliance with Powerlink's AM-POL-0830 Erosion and Sediment Control (Obj: A586778)
- No complaints or reports of significant erosion or downstream sedimentation as a result of Powerlink's activities.
- Where quantitative monitoring of discharge water quality is required (such as in response to an inquiry from a statutory authority or in investigating a complaint), contamination levels of stormwater discharged through runoff from work areas, dewatering of holes or pits to the drainage system will meet the following nominated targets:
  1. Turbidity <20 NTU.
  2. pH 6.5 – 8.5
  3. Dissolved Oxygen ≥6.5 mg/L
  4. No visible debris or hydrocarbons.
### 5.7.1.3 Preconstruction Phase

**Implementation Strategy:**
- Identify, where possible, any saline, sodic, acid or acidic, non-acid sulphate soils which will be disturbed and require special treatment or management. Refer to the acid sulphate soil management strategy for the ASS management measures.
- Identify areas which are subject to landslip or mass slope movements during geotechnical investigations. Identify management measures and implement engineering controls, where required, to reduce the likelihood of slope failure.
- Negotiate with landholders, location of access tracks which will be stable in the medium to long term and also reduce potential ongoing maintenance liabilities.
- Identify land on the CLR or EMR requiring specific erosion and sediment controls to prevent the release of such materials offsite.
- Incorporate progressive erosion and sediment control measures into project and construction timelines.
- Develop a civil works drainage plan and determine rehabilitation requirements. The plan may include access track sketches, benching or site work plans, establish performance and design standards for the sediment and erosion controls and show temporary and permanent erosion controls. This plan is to be provided to the contractor for implementation.
- The civil works drainage plan should also meet the requirements of a *Stormwater Quality Management Plan* according to *IECA Best Practice Erosion and Sediment Control Guidelines 2008* and any relevant Powerlink documents.

**Monitoring and Auditing:**
- Not applicable to this phase

**Reporting:**
- Report and record any identified sodic, saline or acid sulphate soils on the project

**Corrective Action:**
- Not applicable to this phase

### 5.7.1.4 Construction Phase

**Implementation Strategy:**
- Develop a construction Erosion and Sediment Control Plan (ESCP) which outlines staged erosion and sediment control measures and compliments the civil works drainage plan.
- The ESCP should also meet the requirements of a *Stormwater Quality Management Plan* according to *IECA Best Practice Erosion and Sediment Control Guidelines 2008* and any relevant Powerlink documents.
- Implement the requirements of the ESCPs before undertaking works on site. Install devices, when possible, prior to soil disturbance from construction activities.
- Maintain all temporary erosion control measures until the site is stabilised.
- Maintain access tracks in good condition. Adequate erosion and sediment controls will be installed to reduce the likelihood of track deterioration and soil tracking. Access tracks will be installed in accordance with the *Powerlink’s Guidelines for Transmission Line Access Tracks*.
- Identify areas with high erosion potential. Develop specific benching or work plans for high erosion areas prior to soil disturbance. These benching or work plans will detail the controls/methods to be deployed to reduce the potential for erosion and downstream sedimentation. Permanent engineering structures such as gabion walls and rock rip-rapping or vegetative controls such as groundcovers will be used, where necessary, to ensure the long term stability of work areas. The Powerlink Representative will provide advice on the controls required for high erosion potential areas.
- Provide on sites where there is potential for downstream sedimentation, sediment fences, mulch berms, vegetative buffers or other sediment controls down slope of the work area. Maintain and install the controls in accordance with the *IECA Best Practice Erosion and Sediment Control Guidelines*. 
- Consult with Powerlink prior to any modification or removal of sediment and erosion control structures, to determine alternative controls and timeframes for reinstatement.
- Direct all uncontaminated (clean) stormwater to stable land, ensuring that water is dispersed/diffused to prevent erosion.
- Strip topsoil (~200 mm depth) separately and retain for rehabilitation/stabilisation activities.
- Carry out clearing activities in and within 50 metres of a watercourses and development of creek crossings in accordance with the Powerlink Guideline for Activities in a Watercourse or Lake for Destroying up to 0.25 Ha of Vegetation, Excavating up to 500m3, and Placing up to 500m3 of Fill and DEEDI’s Waterway Barrier Works requirements.
- Minimise, where practicable, ground cover and soil disturbance in erosion prone and steeply sloping areas during clearing activities. Determine appropriate clearing methods for moderate to high erosion prone and steep areas so that the clearing methods minimise soil disturbance and potential for soil loss. Consideration should also be given to those clearing methods which reduce damage to ground covers.
- Maintain grass cover to the maximum practicable extent. Reduce damage to grass cover by limiting vehicle movements to work areas and approved access tracks.
- Contractors shall prepare and implement a dewatering plan or work procedure. The dewatering plan/procedure should consider the following:
  - Measures to avoid the accumulation of water in pits, trenches and foundations.
  - Design standards for settling ponds/sediment traps and verification that the pond/traps meet this nominated design standard (only relevant to sites where settling structures have been installed).
  - Triggers for dewatering (e.g. to maintain free storage capacity in a pond for future storm events, to allow pouring of foundations, reinstatement of settling ponds post construction etc)
  - If trigger levels occur, consideration is given to:
    - The receiving environment
    - Quality and quantity of the water
    - Location and accessibility
    - Requirements of this EMP and statutory requirements.
- Record and monitor plan/program
- Keep sealed public roadways clean and free of sediment.
- Limit area and duration of exposed soil to that essential for safe and efficient line construction activities.
- Retain sediment fences and other temporary erosion and sediment controls in place and maintained until the site has been successfully stabilised. On successful stabilisation, the temporary controls will be removed. For example, temporary sediment controls will be removed from below batters when successful revegetation of the batters is achieved (viz. nominal 70% ground cover established on batters – where the preconstruction environment has less than 70% ground cover, the ground over establishment target will be similar to that which existed prior to construction).
- Provide concrete washout pit on site for the washing of concrete tools and agitator truck chutes. This washout pit will be installed such that runoff from areas outside the pit is not allowed to enter the pit and the pit will not discharge in a rainfall event. The washout pit will also be fenced using temporary bunting or covered when not in use to prevent access by the public and/or domestic/native animals. On completion of foundation activities, the concrete washout pit will be removed and the area returned to a preconstruction state.
- Adequate erosion and sediment controls will be installed (both during construction and as part of reinstatement) to protect water resources.
- Erosion and sediment controls shall be designed to consider site conditions, slope, vegetation cover, proximity to sensitive environments, construction phase and climatic conditions.
- Access tracks that are no longer required for construction or for maintenance activities are to be rehabilitated as soon as practical.
Monitoring and Auditing:
- Monitoring shall be in accordance with this EMP and the ESCP.
- Monitoring of storm and flood warnings shall be undertaken on a daily basis throughout construction and contingencies will be developed for such events.
- Undertake visual assessments of presence and effectiveness of erosion and sediment control structures and measures, particularly preceding significant rainfall events (>20 mm in 24 hours)
- Monitor condition and capacity of sediment fences.
- Visual assessment of the condition of adjacent local roads.
- Reviewing adequacy of installed erosion and sediment controls.

Reporting:
- Observations to be recorded in the monthly compliance report with a summary of non-compliances, corrective actions and preventative actions.
- Any water quality test results to be recorded and available when requested.
- Any EMP non-compliances to be documented and reported.
- ESCP, Rehabilitation Plans, Dewatering Plans and Site Work Plans/Benching Plans to be prepared and registered in objective (PLQ documents).

Corrective Action:
- Existing erosion and sediment structures to be re-instated or repaired.
- Clean affected roadways using a road sweeper or brooms and shovels.
- Review of adequacy of stormwater management measures, and install additional measures were required.
- Repair any damaged access tracks.
- Desilt sediment control devices when the 50% capacity of the device is reached.
- Remove sediment fences when sites are stable.

5.7.1.5 Operation and Maintenance Phase

Implementation Strategy:
- Implement Powerlink’s procedure AM-PR-0035 Maintenance of Access Tracks
- Prepare Erosion and Sediment Control Plans for activities which result in soil disturbance.
- Prepare a dewatering plan/work procedure for activities which cause trenches, pits or ponds to be created.
- Keep to approved access tracks and designated work areas wherever practicable.
- Carry out maintenance activities in and within 50 metres of a watercourse in accordance with the Powerlink Vegetation Control Standard AM-STA-0834 and Powerlink Guideline for Activities in a Watercourse or Lake for Destroying up to 0.25 Ha of Vegetation, Excavating up to 500m3, and Placing up to 500m3 of Fill.
- Maintain erosion control measures until the site is stabilised.
- Maintain all permanent erosion control structures in good working order.

Monitoring and Auditing:
- During routine maintenance inspections, identify areas where erosion is occurring and where corrective action is required.
- All remaining erosion control measures should be monitored for their effectiveness for at least 12 months. Remedial measures should be put in place should any controls fail.
- Creek Crossings shall be monitored at least annually to comply with WWBW guidelines
- Ensure that access tracks do not channel water directly into watercourses, but are designed and graded to ensure run-off is filtered through vegetated areas.
### Reporting:
- Advise relevant maintenance crews of any erosion and sediment control issues
- Report damage to access tracks or other assets.
- As specified in Section 3.5 of this EMP.

### Corrective Action:
- Stabilise areas where erosion has occurred or is likely to occur and install/maintain appropriate devices to reduce the potential for further erosion occurring.

#### 5.8 Climate Change

##### 5.8.1 Energy Use/ Greenhouse Gas

#### 5.8.1.1 Policy:
- To be more efficient in the use of resources in the construction, operation and maintenance of the asset.

#### 5.8.1.2 Performance Criteria
- Energy use and waste generation is considered in all activities.
- The ‘Environmental Footprint’ is reduced wherever practicable.

#### 5.8.1.3 Preconstruction Phase

##### Implementation Strategy:
- Design the asset such that losses to the network can be minimised.
- Prepare a waste management plan which identifies measures to reduce, reuse and recycle materials generated by the construction. The waste management plan is to establish a preferred waste management hierarchy and develop principles for achieving good waste management in accordance with the *Environmental Protection (Waste Management) Policy 2000*.
- Reduce to the maximum extent the amount of waste produced during the preconstruction phase.
- Use, where appropriate, telephone hook-ups/ video-conferencing in preference to driving for face to face meetings.
- Adopt yellow anti-insect lighting within all external doorways and walkways where possible

##### Monitoring and Auditing:
- Not applicable for this stage.

##### Reporting:
- Not applicable.

##### Corrective Action:
- Identified opportunities should be incorporated into future projects as part of a process of continual improvement.
5.8.1.4 Construction Phase

Implementation Strategy:
- Induct all site personnel on general measures to reduce the ‘environmental footprint’ of construction activities.
- Implement the waste management plan that incorporates waste management strategies based on the waste hierarchy as outlined in the Environmental Protection Act (waste Management) Policy 2000.
- Minimise vegetation clearing to that only essential for the effective, efficient and safe operation of the asset.
- Turn off plant, equipment and vehicles not in use to prevent unnecessary idling.
- Burning of waste, other than cleared vegetation permitted by the local fire warden and local council, is not to occur.
- Regularly maintain vehicles to ensure efficient operation.
- Limit the number of vehicles used to that essential for efficient construction activities. Car pooling to work sites should occur to reduce the number of vehicle movements associated with the project.
- Schedule delivery truck movements, where possible, such that delivery trucks can backload waste or excess construction materials to reduce the number of truck movements on the project.
- Implement a process to reduce the likelihood or amount or rework.
- Restricting the number of plant and equipment movements by ensuring, wherever possible, that all staged works are completed prior to departure from the work area.
- Use, where appropriate, telephone hook-ups/ video-conferencing in preference to driving for face to face meetings.

Monitoring and Auditing:
- General surveillance of construction activities for the implementation of this strategy.
- General surveillance to ensure that unnecessary construction activities are not being carried out.

Reporting:
- Include in the monthly compliance report, initiatives employed to meet the requirements of this strategy.
- Report on a quarterly basis, initiatives implemented during the construction phase to reduce the ‘environmental footprint’ of activities.
- Report unnecessary construction activities to the Construction Manager and resolve such works with the contractor.

Corrective Action:
- Remind all site personnel the requirement to reduce, where possible, the ‘environmental footprint’ of construction activities.
- Identify opportunities to be incorporated into future projects as part of a process of continual improvement.

5.8.1.5 Operation and Maintenance Phase

Implementation Strategy:
- Induct all site personnel on general measures to reduce the ‘environmental footprint’ of operation and maintenance activities.
- Consider the waste management hierarchy when carrying out operation and maintenance activities.
- Identify opportunities to reduce number of routine inspections.
- Turn off plant, equipment and vehicles not in use to prevent unnecessary idling.
- Limit the number of vehicles used to that essential for efficient construction activities. Car pooling to work sites should occur to reduce the number of vehicle movements associated with the project.
- Schedule delivery truck movements, where possible, such that delivery trucks can backload waste or excess construction materials to reduce the number of truck movements on the project.
- Implement a process to reduce the likelihood or amount of rework.
- Restricting the number of plant and equipment movements by ensuring, wherever possible, that all staged works are completed prior to departure from the work area.
- Use, where appropriate, telephone hook-ups/video-conferencing in preference to driving for face to face meetings.

### Monitoring and Auditing:
- General surveillance of construction activities for the implementation of this strategy.
- General surveillance to ensure that unnecessary construction activities are not being carried out.

### Reporting:
- Include in the monthly report, initiatives employed to meet the requirements of this strategy.
- Report on a quarterly basis, initiatives implemented during the operation and maintenance phase to reduce the ‘environmental footprint’ of activities.
- Report unnecessary construction activities to the Construction Manager and resolve such works with the contractor.

### Corrective Action:
- Identify additional opportunities, and implement measures where practicable to reduce waste from operation and maintenance activities.
- Remind all site personnel the requirement to reduce, where possible, the ‘environmental footprint’ of activities.
- Identify opportunities to be incorporated into future projects as part of a process of continual improvement.

#### 5.8.2 Sulphur Hexafluoride (SF6)

##### 5.8.2.1 Policy
- Emissions of SF6 to the atmosphere shall be minimised through correct storage, handling and monitoring.

##### 5.8.2.2 Performance Criteria

**Performance Criteria:**
- Powerlink’s procedure **AM-PR-0877 Management and Monitoring of SF6 Gas and Bottles**.

##### 5.8.2.3 Preconstruction Phase

**Implementation Strategy:**
- Not applicable to this phase.

**Monitoring and Auditing:**
- Not applicable to this phase.

**Reporting:**
- Not applicable to this phase.

**Corrective Action:**
- Not applicable to this phase.
5.8.2.4 Construction Phase

Implementation Strategy:
- Carry out activities in accordance with Powerlink’s Procedure AM-PR-0877 Management and Monitoring of SF6 Gas and Bottles.
- SF6 shall be handled to minimise the potential for loss to atmosphere. SF6 shall not be intentionally vented to atmosphere.
- Personnel handling SF6 shall have appropriate experience and training in correct handling and loss prevention.

Monitoring and Auditing:
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.

Reporting:
- Record all loss of SF6 to atmosphere in accordance with Powerlink’s procedure AM-PR-0877 Management and Monitoring of SF6 Gas and Bottles.

Corrective Action:
- The cause of the loss to atmosphere of SF6 shall be determined and modifications undertaken to work methods as required to minimise the potential for further loss by manual handling.

5.8.2.5 Operation and Maintenance

Implementation Strategy:
- Carry out activities in accordance with Powerlink’s Procedure AM-PR-0877 Management and Monitoring of SF6 Gas and Bottles.
- SF6 shall be handled to minimise the potential for loss to atmosphere. SF6 shall not be intentionally vented to atmosphere.
- Personnel handling SF6 shall have appropriate experience and training in correct handling and loss prevention.

Monitoring and Auditing:
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.

Reporting:
- Record all loss of SF6 to atmosphere in accordance with Powerlink’s Procedure AM-PR-0877 Management and Monitoring of SF6 Gas and Bottles.

Corrective Action:
- The cause of the loss to atmosphere of SF6 shall be determined and modifications undertaken to work methods as required to minimise the potential for further loss by manual handling.

5.9 Community

5.9.1 Traffic and Site Access

5.9.1.1 Policy

- Ensure safe flow of traffic both to and from the site whilst minimising the impact of construction traffic on the amenity of the nearby community.
5.9.1.2 Performance Criteria

- No movements off the approved access tracks.
- Minimal disturbance to community and normal traffic flows.
- No transport related incidents (inc. vehicles travelling to and from the project).
- Nil complaints from surrounding property owners for access conditions or conduct of construction vehicles.
- Appropriate security and safety fencing.

5.9.1.3 Preconstruction Phase

**Implementation Strategy:**
- Consult landholders and local authorities prior to access regarding construction and ongoing maintenance.
- Limit speed to 40km/h on unsealed access tracks.
- Obtain approvals for all crossings of QR corridors.
- Ensure all gates are to be left as found and any gate handling protocol to be implemented.
- Implement and meet any agreed landholder requirements for access (e.g. notifications, biosecurity management, weed management etc).
- Consult with landowners regarding access. Obtain landholder agreement in relation to property access requirements and location.

**Monitoring and Auditing:**
- Not applicable to this phase

**Reporting:**
- Not applicable to this phase

**Corrective Action:**
- Not applicable to this phase

5.9.1.4 Construction phase

**Implementation Strategy:**
- Implement project requirements for access (e.g. notifications, biosecurity management, weed management etc).
- Ensure that a traffic management plan is prepared for the project.
- Property access for landholders will be maintained at all times.
- Existing roads and farm/property/access tracks shall be utilised wherever practicable.
- Handle gates, as a minimum, in accordance with the following protocol:
  - Open gates are to be left as found.
  - Closed gates are to be returned to the closed position after vehicles pass through the gate.
  - The person who opens the gate is to close the gate to ensure that the gate is secured as found.
  - Gates found closed or locked are not to be left open and unattended, for vehicle convoys or while site personnel visit a property.
  - Gates which have locks installed must be kept locked at all times.
  - Signage on the gate must be followed.
- Use, wherever practicable, existing roads and farm/property/access tracks for access.
- Restrict those off road vehicle movements to those for safe, efficient and essential construction activities.
Minimise development of new access tracks, where possible, by using existing roads and property tracks for access. Using existing accesses will avoid/minimise unnecessary soil, vegetation and wildlife disturbance.

Limit vehicle speed on unsealed accesses to a maximum of 40 km/h. Vehicle speed limit may be reduced on unsealed access tracks where condition of access tracks or potential for environmental nuisances is a concern.

Erect truck warning signs where warranted by limited visibility.

Induct all personnel on the Traffic and Site Access requirements.

Confine all activities to within the approved work area, and approved off easement access tracks. Off easement areas are not to be used for storage of plant, equipment or vehicles without landholder and Powerlink's approval.

Clearly identify all project (Powerlink and contractor) vehicles so that the community can identify the vehicles without confusion.

Notification of helicopter work will be provided 1 week in advance to all susceptible residents.

Care will be taken on all properties with respect to activities on properties such as mustering etc. All personnel will be informed to stay well clear of these activities.

Monitoring and Auditing:
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP
- General surveillance of access tracks and surrounding areas for damage to access tracks, off access movements or impact on other road users.

Reporting:
- Reporting shall be in accordance with Section 3.5 of this EMP.
- Complaints to be recorded in the Complaint Register. Complaints to be immediately reported to Powerlink upon receipt of a complaint (traffic and security matters).
- Reporting of traffic issues will be conducted in accordance with the requirements of approvals/licences e.g. development approval conditions.
- Contractors records of site inductions.
- Report and document damage to private assets, access tracks and local roads.
- Record and report non-compliances, corrective actions and preventative actions.

Corrective Action:
- Review and amend implementation strategies if necessary.
- Repair damage to private assets, access tracks and local roads in consultation with the relevant stakeholder.

5.9.1.5 Operation and Maintenance Phase

Implementation Strategy:
- Determine maintenance access routes and protocols in consultation with landowners.
- Implement weed spread avoidance strategies e.g. wash downs.
- Limit vehicle speed on unsealed access tracks to a maximum of 40 km/h. Vehicle speed limit may be reduced on unsealed access tracks where condition of access tracks or potential for environmental nuisances is a concern.

Monitoring and Auditing:
- Monitoring and auditing against the Performance Criteria and Implementation Strategy sections of this EMP will be conducted.

Reporting:
- Reporting in accordance with Section 3.5.
### 5.9.2 Visual Amenity

#### 5.9.2.1 Policy
- Minimise the visual impact of the asset by specific placement of, appropriate clearing techniques and vegetation screening / tree planting, as applicable.

#### 5.9.2.2 Performance Criteria
- Reduction of visual amenity at sensitive locations adjacent to the asset is minimised.
- Worksites are maintained in a neat and orderly manner to the greatest extent practicable.

#### 5.9.2.3 Preconstruction Phase

**Implementation Strategy:**
- Position, where possible, structures to minimise vegetation clearing near sensitive locations and retain existing vegetation along road reserves generally.

**Monitoring and Auditing:**
- Not applicable to this phase

**Reporting:**
- Not applicable to this phase

**Corrective Action:**
- Not applicable to this phase

#### 5.9.2.4 Construction Phase

**Implementation Strategy:**
- Implement the EWP and the requirements of this EMP.
- Implement screening adjacent to residents where applicable, in consultation with visual amenity consultants.

**Monitoring and Auditing:**
- The visual amenity of the project shall be progressively monitored.
- Through the use of a complaints register, evaluate the impacts from the construction on the visual amenity of adjacent residents

**Reporting:**
- In accordance with Section 3.5
- Summary of non-compliances, corrective actions and preventative actions to recorded in the monthly compliance report.

**Corrective Action:**
5.9.2.5 Operation and Maintenance Phase

**Implementation Strategy:**
- Maintain vegetation to provide visual screening of assets where possible and appropriate.

**Monitoring and Auditing:**
- Monitoring and auditing against the Performance Criteria and Implementation Strategy sections of this EMP will be conducted.

**Reporting:**
- As specified in Section 3.5

**Corrective Action:**
- Investigate any complaint and recommend appropriate mitigation.

5.10 Waste Management

5.10.1.1 Waste Management

5.10.1.2 Policy

- Compliance with *Environmental Protection (Waste) Policy 1997*

5.10.1.3 Performance Criteria

- No uncontrolled waste or litter observed on site.
- No evidence of uncontrolled releases to surrounding environment (e.g. dewatering or fugitive waste).
- Appropriate storage and disposal of fuels and waste evident on site.
- Compliance with *AS 1940 –2004 The Storage and handling of Flammable and combustible liquids*.
- Powerlink’s procedure *AM-POL-1001 Environmental Management of Insulating and Petroleum Based Liquids*.

5.10.1.4 Preconstruction Phase

**Implementation Strategy:**
- Not applicable to this phase

**Monitoring and Auditing:**
- Not applicable to this phase

**Reporting:**
- Not applicable to this phase
**Corrective Action:**
- Not applicable to this phase

### 5.10.1.5 Construction Phase

**Implementation Strategy:**
- Prepare (the contractor) a Waste Management Plan which addresses the collection, handling and disposal of waste. The Waste Management Plan should explore the opportunities to avoid, reduce, reuse and recycle waste materials. Where practical, wastes shall be segregated and reused/recycled (e.g. scrap metal and cable off cuts). The waste management plan is to also establish a preferred waste management hierarchy and develop principles for achieving good waste management in accordance with the *Environmental Protection (Waste Management) Policy 2000*. This plan must identify waste removal service providers for the removal of the various wastes identified for the construction process.
- Clearly identify collection bins as “general waste” and “recyclables”.
- Dispose of felled timber in consultation with landowner. Vegetation residues should not impact on downstream water quality or the easement land use. Consideration should also be given when assessing appropriate residual material management to potential fire hazard and impact on the energised line post-construction in the event of a fire.
- Refuse containers to be used and personal waste is to be found on the site. Personal waste, including food scraps, are to be removed from site at the end of each day and disposed of offsite at a facility approved to take such waste.
- Collect and dispose of appropriately and regularly, all construction waste. Construction waste waiting collection is to be left in a tidy manner such that it does not impact on stock or have the potential to be windblown otherwise it will be removed.
- Use ablation facilities/portable toilets when provided.
- Prohibit the discard of cigarette butts to ground. The contractor is to address the management of cigarette butts in the Contractor’s Waste Management Plan.
- Dispose all personal and construction waste off site at a facility approved to accept such waste.

**Reporting:**
- Reporting as specified by Section 3.5.
- Landholder clearing consultation record to be completed.
- Copies of all hazardous waste disposal certificates provided to Powerlink.
- Inductions register.
- Summary of non-compliances, corrective actions and preventative actions to recorded in the monthly compliance report.

**Corrective Action:**
- Clean up works in accordance with the Performance Criteria and Implementation Strategy sections of this EMP.

### 5.10.1.6 Operation and Maintenance Phase

**Implementation Strategy:**
- As specified for the Construction Phase of this EMP

**Monitoring and Auditing:**
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.

**Reporting:**
- Reporting as specified by Section 3.5
Corrective Action:
- Clean up works in accordance with the Performance Criteria and Implementation Strategy sections of this EMP.

5.11 Hazardous Materials

5.11.1 Hazardous Material

5.11.2 Policy


5.11.3 Performance Criteria

Performance Criteria:
- Chemicals stored, handled and disposed of in accordance with legislative requirements, Australian Standards and MSDS.
- No contamination of land or water as a result of a spill.
- No new lands recorded on the Contaminated Lands Register.
- Powerlink’s policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquids (Obj A201715).

5.11.4 Preconstruction Phase

Implementation Strategy:
- Prepare an Emergency Response Plan for construction activities (the contractor will prepare such plans where the works are contracted out). It should include procedures to ensure the correct storage, handling and transport of hazardous materials, and proposed response to accidental spills and contamination incidences.
- Obtain approval from landholders for the application of chemicals (e.g. herbicides) on their land.
- Investigate materials that may be suspected of containing asbestos or PCB's.
- Ensure that the asbestos register is up to date by identify any materials or equipment containing asbestos.

Monitoring and Auditing:
- Not applicable to this phase

Reporting:
- Complete landholder consultation records for clearing and access works.

Corrective Action:
- Not applicable to this phase.
5.11.5 Construction Phase

**Implementation Strategy:**
- Carry out activities in accordance with Powerlink’s policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquids (Obj A201715).
- Ensure hazardous materials are stored appropriately and are prevented from draining onto the ground or into waterways.
- Transport, handle and store all oils and chemicals in accordance with the relevant Australian Standards (including secure storages) and in line with Powerlink’s Policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquids (Obj A201715). Temporary bunds may include earthen bund lined with plastic sheeting or portable plastic trays. Long term and permanent storages will be installed with Australian Standard and statutory requirements, and capture devices will have a capacity of at least 110% the volume of the maximum chemical storage capacity of the facility.
- Prohibit the refuelling of vehicles and machinery within 100 m of a watercourse or open drain and when possible all refuelling will be off-site at an approved refuelling station (e.g. service station).
- Maintain machinery in accordance with manufacturer’s recommendations/servicing schedules.
- Keep Material Safety Data Sheets (MSDS) for each chemical used on-site.
- Ensure MSDS are kept at a location that is easily accessible by all site personnel.
- Maintain records for chemical inventory and storage locations.
- Train all site personnel on safety and response procedures during site inductions.
- Ensure materials and equipment (viz. spill kit) required to respond to a hazardous spill are to be on site at all times when hazardous materials are being used, transported, loaded or unloaded.
- All vehicles and machinery to be equipped with spill kits at all times.
- Spill kit equipment must be fit for purpose based on type of chemical/material and expected quantities.
- Ensure waste material is disposed of appropriately and in accordance with the requirements of the Environmental Protection (Waste Management) Policy.
- Handle spoil from land on the contaminated land register or environmental management register in accordance with the Environmental Protection Act and its regulations. Where possible, spoil generated on land identified as being contaminated will be kept on the listed parcel of land, stabilised and rehabilitated. Spoil in such cases will not be placed in flood plains, or within 100 m of a water course.
- Store regulated waste (e.g. hydrocarbons) in appropriately sealed containers suitably marked identifying their contents. Transfer to a waste contractor licensed to receive such waste. Regulated waste quantities over 250 kg must be tracked using the methods under the Environmental Protection Act and Regulations/Policies. Records of disposal shall be maintained as per Powerlink Policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquid (Obj A201715).
- Review the asbestos register and include as part of the initial induction for personnel.
- Induct personnel on the correct procedure for the management of PCBs and asbestos.
- Ensure correct disposal for all material and equipment containing PCB’s.
- No broadcast of chemicals to be used without Powerlink’s approval.
- A copy of the waste tracking certificate will need to be retained by Powerlink.
- All spills to water or within a protected area will be reported to the Manager Environmental Strategies.

**Monitoring and Auditing:**
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP.
- Carry out monthly inspection of contractor’s records and registers to ensure compliance with the requirements of the EMP.
Reporting:
- Spill Register to be kept on site for all spills.
- MSDS for all chemicals to be retained on site in a MSDS register.
- All spills of chemicals or hydrocarbons on-site, greater than 10 litres, are to be cleaned up reported and immediately.
- Spills with a clean up costs greater than $5000 or that occur within a protected area or waterway will be reported to the Manager Environmental Strategies immediately.
- Summary of spills, non-compliances, corrective actions and preventative actions to recorded in the monthly compliance report.

Corrective Action:
- Spills to be remediated depending on nature of product (the Manager Environmental Strategies will advise correct procedure). Immediate action should include:
  - Small Hydrocarbon Spill: Apply absorbent material.
  - Large Hydrocarbon Spill: Install containment (e.g. block drains, surround with sandbags, dig earthen bund) and apply absorbent material.
  - Chemical Spill: Application of appropriate absorbent material and containment.
- All spills will be managed as per Powerlink Policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquid (Obj A201715)

5.11.1.6 Operation and Maintenance

Implementation Strategy:
- Carry out activities in accordance with Powerlink’s policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquids (Obj A201715)
- Ensure hazardous materials are stored appropriately and are prevented from draining onto the ground or into waterways.
- Transport, handle and store all oils and chemicals in accordance with the relevant Australian Standards (including secure storages) and in line with Powerlink’s Policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquids (Obj A201715). Temporary bunds may include earthen bund lined with plastic sheeting or portable plastic trays. Long term and permanent storages will be installed with Australian Standard and statutory requirements, and capture devices will have a capacity of at least 110% the volume of the maximum chemical storage capacity of the facility.
- Prohibit the refuelling of vehicles and machinery within 100m of a watercourse or open drain and when possible all refuelling will be off-site at an approved refuelling station (e.g. service station).
- Maintain machinery in accordance with manufacturer’s recommendations/servicing schedules.
- Keep Material Safety Data Sheets (MSDS) for each chemical used on-site.
- Ensure MSDS are kept at a location that is easily accessible by all site personnel.
- Maintain records for chemical inventory and storage locations.
- Train all site personnel on safety and response procedures during site inductions.
- Ensure materials and equipment (viz. spill kit) required to respond to a hazardous spill are to be on site at all times when hazardous materials are being used, transported, loaded or unloaded.
- All vehicles and machinery to be equipped with spill kits at all times.
- Spill kit equipment must be fit for purpose based on type of chemical/material and expected quantities.
- Ensure waste material is disposed of appropriately and in accordance with the requirements of the Environmental Protection (Waste Management) Policy.
- Handle spoil from land on the contaminated land register or environmental management register in accordance with the Environmental Protection Act and its regulations. Where possible, spoil generated on land identified as being contaminated will be kept on the listed parcel of land, stabilised and rehabilitated. Spoil in such cases will not be placed in flood plains, or within 100m of a water course.
- Store regulated waste (e.g. hydrocarbons) in appropriately sealed containers suitably marked identifying their contents. Transfer to a waste contractor licensed to receive such waste. Regulated waste quantities over 250kg must be tracked using the methods under the Environmental Protection Act and Regulations/Policies. Records of disposal shall be maintained as per Powerlink policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquids (Obj A201715).
- Review the asbestos register and include as part or the initial induction for personnel.
- Induct personnel on the correct procedure for the management of PCBs and asbestos.
- Ensure correct disposal for all material and equipment containing PCB's.
- No broadcast of chemicals to be used without Powerlink’s approval.
- A copy of the waste tracking certificate will need to be retained by Powerlink.
- All spills to water or within a protected area will be reported to the Manager Environmental Strategies.

### Monitoring and Auditing:
- Monitoring will be conducted to ensure compliance with the Performance Criteria and Implementation Strategies specified in this EMP

### Reporting:
- Spill Register to be kept on site for all spills.
- MSDS for all chemicals to be retained on site in a MSDS register.
- All spills of chemicals or hydrocarbons on-site, greater than 10 litres, are to be cleaned up and reported immediately.
- Spills with a clean up costs greater than $5000 or that occur within a protected area or waterway will be reported to the Manager Environmental Strategies immediately.
- Summary of spills, non-compliances, corrective actions and preventative actions to recorded in the monthly compliance report.

### Corrective Action:
- Spills to be remediated depending on nature of product (the Manager Environmental Strategies will advise correct procedure). Immediate action should include:
  - Small Hydrocarbon Spill: Apply absorbent material.
  - Large Hydrocarbon Spill: Install containment (e.g. block drains, surround with sandbags, dig earthen bund) and apply absorbent material.
  - Chemical Spill: Application of appropriate absorbent material and containment.
- All spills will be managed as per Powerlink Policy AM-POL-1001 Environmental Management of Insulating and Petroleum based Liquid (Obj A201715)
6 Appendix A – Environmental Policy

Environmental Policy

Powerlink Queensland is responsible for the operation, maintenance and development of the high voltage transmission network in Queensland.

Powerlink Queensland is committed to responsible environmental management as an integral part of its business activities. Powerlink Queensland demonstrates that commitment by:

- consulting openly, honestly and proactively with the community and statutory authorities on the potential environmental impacts of its plans and activities. Powerlink Queensland is responsive to constructive suggestions to eliminate or minimise potentially adverse impacts;
- incorporating environmental factors such as land use, noise and visual impact, protection of flora and fauna, pollution prevention, and waste management into the fundamental business processes and procedures;
- maintaining a structured approach to managing our environmental aspects through an Environmental Management System;
- seeking continual improvement in the environmental performance of our operations;
- complying with relevant environmental legislation; and
- building and encouraging ownership of environmental care among our people by providing training and support.
Appendix E

Development Approvals
## Development Approvals Summary

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Responsible Authority</th>
<th>Activity</th>
<th>License / Permit / Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboriginal Cultural Heritage Act 2003</td>
<td>Department of Environment and Resource Management</td>
<td>Avoidance or minimise harm to significant cultural heritage areas or objects</td>
<td>Powerlink to implement the Cultural Heritage Duty of Care during construction.</td>
</tr>
<tr>
<td>Acquisition of Land Act 1967</td>
<td>Department of Environment and Resource Management</td>
<td>Acquisition of freehold land for easement.</td>
<td>Not require. No freehold land will be traversed by the Study Alignment.</td>
</tr>
<tr>
<td>Agricultural Chemicals Distribution Control Act 1966</td>
<td>Department of Employment, Economic Development and Innovation</td>
<td>Controls ground and aerial spraying, spreading or dispersing of herbicides and agricultural chemicals.</td>
<td>Contractors are required to hold appropriate licences and training.</td>
</tr>
<tr>
<td>Coastal Protection Management Act 1995</td>
<td>Department of Environment and Resource Management</td>
<td>Works/reconfiguration within Coastal Management District or tidal waters.</td>
<td>Not required. Works are not within the CMD.</td>
</tr>
<tr>
<td>Environmental Protection Act 1994</td>
<td>Department of Environment and Resource Management</td>
<td>Where ‘serious and material environmental harm’ is caused or threatened.</td>
<td>Duty of Care and Duty to Notify. Permits will be required in some situations for Environmentally Relevant Activities such as on-site concrete batching.</td>
</tr>
<tr>
<td>Fire and Rescue Services Act 1990</td>
<td>Department of Community Safety</td>
<td>Burning off.</td>
<td>Requirements dependent on nature of vegetation, location, Powerlink policies and landowner requirements. Permits for fires may be required.</td>
</tr>
<tr>
<td>Fisheries Act 1994</td>
<td>Department of Employment, Economic Development and Innovation</td>
<td>Works within waterways that involve erecting a barrier to fish movement across a watercourse require permit. A self-assessable code applies to Powerlink in certain circumstances.</td>
<td>Unlikely to be required – to be assessed on a case by case basis during construction.</td>
</tr>
<tr>
<td>Forestry Act 1959</td>
<td>Department of Environment and Resource Management</td>
<td>Title in forestry and quarry products on leasehold and specified freehold land is vested in the State.</td>
<td>DERM Forest Products must be notified of construction, with operations timeline and notice of timber and quarry products to be utilised/cleared. Salvage should be undertaken or compensation payable.</td>
</tr>
<tr>
<td>Land Act 1994</td>
<td>Department of Environment and Resource Management</td>
<td>Creation of easements in non-freehold land.</td>
<td>Resumptions for the parts of easement not on freehold land will be carried out under this Act.</td>
</tr>
<tr>
<td>Legislation</td>
<td>Responsible Authority</td>
<td>Activity</td>
<td>License / Permit / Approval</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>Land Protection (Pest and Stock Route Management) Act 2002</strong></td>
<td>Department of Environment and Resource Management</td>
<td>Control and management of declared plants and animals. Management of stock routes.</td>
<td>Class 1 and 2 pests to be controlled by landholder. Powerlink and Contractor responsible for area of works. Powerlink to inform councils when stringing is to occur across stock routes.</td>
</tr>
<tr>
<td><strong>Native Title (Queensland) Act 1993</strong></td>
<td>Department of Environment and Resource Management</td>
<td>Suppression of Native Title rights and interests that are inconsistent with the construction and operation of the transmission line.</td>
<td>Issue of s.24K(A) notices under the Act to claimant party. No other action/licence/permit required.</td>
</tr>
<tr>
<td><strong>Nature Conservation Act 1992</strong></td>
<td>Department of Environment and Resource Management</td>
<td>Removal or disturbance of protected fauna and flora (clear native vegetation, tamper with native fauna and/or tamper with animal breeding places).</td>
<td>No approvals are necessary for the removal of protected plants within easements granted by Governor in Council under s.41(1)(a)(i) of the Nature Conservation (Protected Plants) Conservation Plan. For State land or land outside of the easement required for access or laydown etc., a clearing permit will be required. Species Management Plan to be approved by DERM prior to construction in order to tamper with animal breeding places. Damage mitigation permit required for listed species to be disturbed on State land.</td>
</tr>
<tr>
<td><strong>Soil Conservation Act 1986</strong></td>
<td>Department of Environment and Resource Management</td>
<td>Disturbance of land within an area managed under a Soil Conservation Plan approved under the Act</td>
<td>Specific project soil conservation plan not required – obligations met through implementation of EMP.</td>
</tr>
<tr>
<td><strong>State Development and Public Works Organisation Act 1971</strong></td>
<td>Department of Employment, Economic Development and Innovation</td>
<td>Only applicable to works deemed state significant under the Act.</td>
<td>Not required – this project is not a state significant project.</td>
</tr>
<tr>
<td>Legislation</td>
<td>Responsible Authority</td>
<td>Activity</td>
<td>License / Permit / Approval</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Sustainable Planning Act 2009</strong></td>
<td>Department of Infrastructure and Planning</td>
<td>Confers responsibility to Powerlink as an entity to be seen to be advancing the Act's purpose in addressing ecological sustainability</td>
<td>Provides legislative framework for assessment process. Designation for community infrastructure required. Material Change of Use application may be required for on-site concrete batching depending on volumes to be produced.</td>
</tr>
<tr>
<td><strong>Sustainable Planning Regulation 2010</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transport Infrastructure Act 1994 - Queensland</strong></td>
<td>Department Transport and Main Roads</td>
<td>Rail and road crossings and placement of towers inside or in relation to road reserves or rail land.</td>
<td>Appropriate tenure agreement will be negotiated with DTMR and QR National.</td>
</tr>
<tr>
<td><strong>Transport Planning and Coordination Act 1994</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transport Operation (Road Use Management) Act 1995</strong></td>
<td>Department Transport and Main Roads</td>
<td>Traffic management associated with construction and operation of infrastructure.</td>
<td>A traffic management plan will be prepared for use during construction.</td>
</tr>
<tr>
<td><strong>Vegetation Management Act 1999</strong></td>
<td>Department of Environment and Resource Management</td>
<td>Clearing of native vegetation.</td>
<td>Not required. Exemption applies under the Sustainable Planning Act Schedule 24 for clearing within land designated for power transmission on any tenure type. Clearing outside of the designated easement on freehold land will require a permit in some situations (depending on purpose, size of clearing, and type of vegetation).</td>
</tr>
<tr>
<td><strong>Water Act 2000</strong></td>
<td>Department of Environment and Resource Management</td>
<td>Destroy vegetation, excavate or place fill in a watercourse requires riverine protection permit.</td>
<td>Not required if works are undertaken in accordance with Water Act guidelines for entities.</td>
</tr>
<tr>
<td><strong>Workplace, Health &amp; Safety Act 1995</strong></td>
<td>Department of Employment, Economic Development and Innovation</td>
<td>To provide a safe workplace and ensure work practices minimise risk of injury, death or illness to workers and public.</td>
<td>Compliance with Industry Codes of Practice</td>
</tr>
</tbody>
</table>