

Section 19

CONCLUSION AND COMMITMENTS

19. Conclusions and Commitments

19.1 Conclusions

The Surat Basin Rail Project was declared a 'significant project' pursuant to the *State Development and Public Works Organisation Act 1971* and this EIS is part of the environmental assessment of the Project being administered by the DIP in accordance with that legislation.

The purpose of this EIS is to assess the environmental impacts of the Project and make recommendations as to the most appropriate mitigation measures. Overall, the EIS should assist the Project to be sustainable by managing the environmental impacts that may arise during construction and over the Project's lifetime. Adequate management and mitigation measures should ensure that the use of natural and human resources, changes to social factors and services and ecosystem values are controlled and managed in a way that does not compromise the ability of future generations to meet their own needs.

This EIS is the result of technical studies and community and agency consultation. The likely extent of impact as a result of the Project has been assessed in accordance with the ToR that was developed by DIP and made available for public and advisory agency comment. The ToR is included as Appendix B. Appendix C demonstrates compliance with the ToR by referencing ToR requirements within this EIS.

Details of the potential impacts of the Project including the potential benefits to the community, region and state are set out in separate volumes. This volume is the EIS main text. Other volumes contain the Appendices and Maps. A separate document (which includes a CD of all volumes) provides a summary of the EIS.

Significantly, it was concluded that the Project will potentially bring benefits to business, industry and community at both small and large scales.

The Project will effectively deliver a transport solution enabling approximately four billion tonnes of coal reserves in the Surat Basin to become a viable economic resource.

While the Wandoan Mine Project is likely to be the first developed mine in the region, the rail link would provide access to any mines in the Surat Basin provided they entered into the appropriate commercial arrangements. The Western Rail System mines and deposits also have potential to use the Project if the rail network south of Wandoan was adequately upgraded. The Moura Rail System, to which the Project will connect, is expected to continue expanding significantly with the rise in coal production in operating mines, new mines under construction and planned future mines.

Through this EIS, it was determined that the Surat Basin Rail, mining development and associated projects are likely to provide long-term economic benefits through the creation of employment and business opportunities associated in construction, mining, rail and support industries. These developments will benefit regional, state, and national economies.

In the immediate term there will be some economic benefits that flow to the regional economy through the increased expenditure throughout the construction phase. Although this expenditure will be widely dispersed, there will be some opportunities for local providers to supply the Project with goods and services. These opportunities are outlined in Sections 14 and 15 of the EIS.

The detailed investigations, technical studies and community engagement activities undertaken in developing this EIS, also identified a range of key emerging impacts and issues that will need to be addressed through detailed design, construction and maintenance of the Project. This EIS has addressed these in detail, providing appropriate mitigation measures and Project commitments.

The key impacts of the Project are summarised in the EIS Summary.

The outcomes from the impact assessment have been used to reduce environmental impacts through the design and location of the preferred alignment. A range of mitigation measures have been developed as part of this EIS to reduce, where practicable, environmental impacts during construction and operation of the Project.

The recommended mitigation and management measures have been incorporated into an overarching Environmental Management Plan (Planning) (EMP(P)) included as Section 18, which forms the basis for the Construction Environmental Management Plan (EMP(C)) and the Operational Environmental Management Plan (EMP(O)). The management of environmental impacts in accordance with the EMPs will contribute to the long term sustainability of the Project.

19.2 Commitments

To ensure compliance with the general environmental duty and implementation of the EMP(P), the following commitments have been formulated and agreed to by the Proponent.

Figure19-1: Environmental Aspects and Commitments

Topography and Landform	
1	Landform will be re-contoured to provide batters that are stable.
2	Works associated with the disturbance of creeks, surface drainage lines and wetland areas will be designed and managed to reduce the potential for erosion and instability.
Geology and Soil Erosion	
3	Bulk earthworks related construction activities will be planned where practicable to occur during dry periods to minimise the risk of erosion. Where required, erosion control measures will be implemented.
4	Effective erosion and sediment control measures will be developed and implemented in accordance with the Soil Erosion and Sediment Control Engineering Guidelines for Queensland Construction Sites – June 1996 endorsed by the Queensland Division of the Institution of Engineers Australia.
5	A revegetation management plan and schedule will be prepared and implemented progressively throughout construction in order to stabilise where practicable exposed erosion prone soils and subsoils.
Land Use and Infrastructure	
6	Functionality of affected farm operations will be maintained ensuring, where practicable, continued operation of the local rural industry. Extended disruptions will be advised in advance and mitigating measures taken where appropriate.
7	Disruption to essential services during construction will be managed.
8	Land owners will be consulted in determining the most suitable fencing standard and fencing maintenance protocol.
Contaminated Land	
9	Existing contamination will be managed in accordance with the Environmental Protection Agency's most recent guidelines and standards.

10	Potential contamination to air, land and water during construction and operation will be managed and reported in accordance with the Environmental Protection Agency's requirements.
11	Any new significant environmental impacts will be reported to relevant government stakeholders to ensure environmental impacts are appropriately assessed and managed.
Nature Conservation	
12	Consideration will be given to fauna-sensitive design to manage potential fauna impacts associated with the Project.
13	Flora and Fauna Management Plans will be developed and implemented to manage potential harm.
14	Clearing of remnant vegetation will be restricted to allow safe construction, operation and maintenance of the Project.
15	An Environmental Offset Strategy will be developed and implemented in consultation with relevant stakeholders in accordance with the <i>Vegetation Management Act 1999</i> .
Surface Water	
16	Water quality will be managed in accordance with Soil Erosion and Sediment Control Engineering Guidelines for Queensland Construction Sites – June 1996 endorsed by the Queensland Division of the Institution of Engineers Australia.
17	Spills and pollution arising from the transport and storage of fuels and chemicals and vehicle/plant refuelling will be managed through the EMP. Appropriate practices for the storage, transport and use will be developed for all fuel and chemical contaminants.
18	Waterways will not be disturbed for the construction activities unless approval has been granted by appropriate authorities.
19	The Project will result in acceptable increases in flood height and velocities with flooding impacts of the Project contained to acceptable levels.
20	Sustainable use of surface water will be sought through consultation with relevant government agencies and members of the community.
Ground Water	
21	Sustainable use of groundwater will be sought through consultation with relevant government agencies and members of the community.
Air Quality	
22	Dust and other air emissions during construction will be managed in accordance with relevant environmental standards and legislative requirements and in accordance with the EMP.
23	Coal dust will be managed in accordance with environmental requirements. Resource companies and rail operators that use the line will be consulted on the management of coal dust emissions during operation.
24	Greenhouse gas emission resulting from railway operations will be managed in accordance with industry standards and legislative requirements.
Noise and Vibration	
25	Construction noise and vibration will be managed in accordance with relevant environmental standards and in accordance with the EMP.
26	Blasting will be undertaken in accordance with the Environmental Protection Regulation (Part 2a s61 relating to noise and vibration from blasting) to manage the safety of workers and the community. Pre and post blasting surveys will be carried out on critical properties to monitor evidence of structural damage where appropriate.

27	Noise and vibration will be managed during operation through the provision of appropriate design measures, implementation of operational techniques to meet environmental requirements and by promptly responding to community complaints about noise issues, with each issue addressed on a case by case basis.
Waste	
28	Consultation will be held with local authorities to determine an appropriate waste disposal strategy.
29	A Waste Management Plan will be developed in accordance with relevant legislation and the Waste Management Hierarchy: avoid, reuse, recycle, recover energy and dispose.
Transport	
30	A Traffic Management Plan will be developed for the construction phase of the Project in consultation with potentially impacted stakeholders, including Department of Main Roads and local authorities, to identify appropriate routes, alternative access arrangements and delivery times to manage interference and safety hazards to road users.
31	Road access will be monitored during construction to manage potential interruptions to the community.
32	Local authorities will be consulted regarding the standard of road condition that is to be maintained by the Proponent.
33	Adequate grade separation and level crossings will be provided and designed to industry standards to manage potential interruptions.
Indigenous Cultural Heritage	
34	Cultural Heritage Management Plans will be developed in consultation with native title claimants to identify and protect indigenous cultural heritage values where practicable.
Non-Indigenous Cultural Heritage	
35	Chance finding procedures will be implemented as part of the EMP to ensure that non-indigenous heritage sites are identified and protected where practicable.
Social Environment	
36	Local authorities will be consulted to determine desirable community-based initiatives.
37	Equal Employment Opportunity practices will be embraced to encourage local residents and local Aboriginal and Torres Strait Islander people to be presented with the employment opportunities that arise during construction and operation of the Project.
38	An ongoing community engagement program will be developed and implemented to ensure community awareness and participation in the Projects progression and completion.
Economic Environment	
39	Contractors building, operating and maintaining the Project will be directed to consider the Queensland Government's Local Industry Policy providing opportunities for local business and industries.
40	Contractors building, operating and maintaining the Project will be directed to consider the Queensland Government's Building and Construction Contracts – Structured Training Policy providing structured training for apprentices, trainees and cadets looking for work within the building and construction industry.
Hazard and Risk	
41	Safety Management Plans will be developed to include a detailed Project specific construction and operational risk assessment in accordance with AS/NZS Risk Management Standard 4360:1999.
42	Key stakeholders will be consulted to develop and implement appropriate Emergency Preparedness and Response Plans and Procedures for identified risks.

43	A Project Emergency Response Team will be established for events outlined in the risk assessment for the construction and operation phase.
44	Procedures and training will be implemented to comply with all legislation and codes relating to the correct storage, handling, transportation and emergency response for dangerous goods and hazardous substances.
45	An auditing schedule for all management plans will be developed and implemented. This will include a quality assessment within the accreditation regime applicable to each company involved in the building, operating and maintenance of the Project.