



Coordinator-General's Report Wandoan Coal project

November 2010

REPORT
SUMMARY

The Coordinator-General (CG) has recommended that the Wandoan Coal project proceed, subject to the recommendations and conditions proposed in his report.

This document summarises the report and includes background information, assessment and conclusions about the environmental effects of the project, associated mitigation measures and recommendations.

What happens now?

The CG's report will be provided to the Australian Government for a decision on the controlled actions for the project under its jurisdiction. It will also be forwarded to state agencies and local authorities for their consideration in issuing development approvals.

Background

The proponent, the Wandoan Joint Venture (WJV), is proposing a new open-cut, thermal coal mine and supporting infrastructure located in the Surat Basin, to the west of Wandoan, approximately 350 kilometres north-west of Brisbane and 60 kilometres south of Taroom.

The thermal coal deposits for the project are estimated to be in excess of 1.2 billion tonnes located within three Mining Lease Application areas (MLAs) 50229, 50230 and 50231. The MLAs make up approximately 32 000 hectares and approximately 11 000 hectares would be used for mining operations. The remaining land would act as a buffer zone between mining operations and sensitive places.

The proponent is seeking a 32-year mining lease (2 years for construction and 30 years for operation) to extract the coal at a rate of approximately 30 million tonnes per year run-of-mine (ROM) coal from the three MLA areas. Ten pit areas, incorporating 16 individual pits in total, are scheduled to open during the 30-year operation of the mine. Approximately 853 million tonnes ROM coal would be mined during the 30-year period. This ROM coal will be washed on-site at a coal handling and processing plant and result in production of approximately 22 million tonnes per year of product coal.

The Wandoan Coal project is related to three other major infrastructure projects in the Central Queensland region that are proposed to be developed over the next few years. These are the Surat Basin Rail project, the Wiggins Island Coal Terminal expansion and the Balaclava Island Coal Export Terminal project. These projects are the subjects of separate assessment processes.



Coordinator-General's conclusions

The report contains conclusions and conditions on the following topics.

Mineral and petroleum tenements

The proponent has applied for MLAs over areas that are also subject to existing authorities to prospect for petroleum and one petroleum lease. Under the *Mineral Resources Act 1989*, the parties must use reasonable attempts to reach agreement on coordination arrangements. These commercial discussions are taking place and the report does not provide further commentary on these matters.

Land use and visual amenity

The majority of the land within the project site is highly disturbed, has a long history of vegetation clearing and has been primarily used for cattle grazing. While there is some small-scale dry land cropping, which is mainly used for cattle feed lots and fodder, cattle grazing is the dominant land use across the project area. The report makes recommendations regarding progressively rehabilitating land as mining activities conclude.

To reduce potential adverse visual amenity impacts on Wandoan township, the CG recommends that the Queensland Minister for Mines and Energy administer the *Mineral Resources Act 1989* so that no open-cut coal mining shall occur during the life of this project at any point located within a two-kilometre 'high management zone' surrounding Wandoan. Related activities such as construction and operation of roads, pipelines and powerlines will be allowed in this zone.

The CG is satisfied that the mitigation measures proposed by the proponent, combined with progressive rehabilitation of mined and disturbed areas, will greatly minimise visual impact in the area.

Air quality management

Air quality and noise and vibration studies undertaken for the EIS indicated that operating a dragline at full capacity in Frank Creek Pit could adversely impact living conditions in the township of Wandoan.

Dust generation from the mine close to Wandoan was a key issue in public submissions on the EIS. The two-kilometre mining exclusion 'high management zone' is intended to partly mitigate dust impacts.

The SEIS took into account the revised air quality standards specified in the *Environmental Protection (Air) Policy 2008* (EPP (Air)).

Based on Queensland Health's advice, the EPP (Air) objective of 50 micrograms per cubic metre ($\mu\text{g}/\text{m}^3$) and five allowable exceedences per annum for 24 hour average concentration of airborne particulate matter with a diameter less than ten micrometres (PM_{10}), is a key element of air quality management

applied to the project. The proponent is adopting this standard for the project.

The proponent must adopt 'high management control measures' on days where meteorological conditions indicate that the $50\mu\text{g}/\text{m}^3$ PM_{10} limit is likely to be exceeded if additional changes to mine management practices are not implemented.

Noise and vibration

Approximately 10 per cent of submissions on the EIS raised the issue of noise and vibration resulting from mining activities. Given the close proximity of mining operations to the township of Wandoan, the two-kilometre mining exclusion 'high management zone' is intended to mitigate noise and vibration impacts.

Under conditions proposed by the Department of Environment and Resource Management for the draft Environmental Authority, the proponent must monitor noise and vibration levels at various 'sensitive receptors', employ noise and vibration mitigation measures as required and have complaint handling processes in place.

Accommodation facility—air quality, noise and vibration

After releasing the SEIS, the proponent advised of a new preferred location for the accommodation facility for the project workforce. The proposed location is within MLA 50229, just west of Woleebee Creek and south of Booral Road. The accommodation facility will be assessed by Western Downs Regional Council against its planning scheme in accordance with the *Sustainable Planning Act 2009* (SPA).

The CG recommends the proponent treats the proposed workforce accommodation facility in the same way for air quality and noise and vibration impacts as if it were regarded as a sensitive receptor for the purposes of the Department of Environment and Resource Management's draft Environmental Authority conditions. This will ensure that the project workers housed in the accommodation facility are treated in the same way as residents of Wandoan for air quality, noise and vibration.

Water supply and management

The Department of Environment and Resource Management advised that further information is required on how the off-lease impacts of the Woleebee Creek diversion—which is the largest proposed creek diversion for the project—could be managed during construction and operation of the diversion. The Department of Environment and Resource Management advised that this matter can be dealt with through the water licensing process as regulated under the provisions of the *Water Act 2000*. Hence, no conditions have been set in the report.

The proponent must carry out failure impact assessments on particular dams that exceed the



dimensions in the *Water Supply (Safety and Reliability) Act 2008* (WSA). A failure impact assessment determines if a dam is a referable dam and, if it is, it becomes assessable development (operational works).

The Department of Environment and Resource Management advised that this matter can be effectively regulated under the provisions of the WSA.

As part of the draft infrastructure agreement currently being negotiated between the proponent and Western Downs Regional Council, the proponent must fund upgrades to the wastewater treatment facility and the potable water supply facility. As these facilities are related to the operation of the project, conditions are imposed to ensure that the proponent provides funding and facilitates their development to the satisfaction of the Western Downs Regional Council and the benefit of the Wandoan community.

For raw water supply for mining operations, the proponent has concluded that supply of water from the Great Artesian Basin is not a sustainable option. Accordingly, the proponent is considering two options for raw water supply for mining operations.

One option is coal seam methane by-product water to be piped from an area south of the mining operations. The other option is the raising of the existing Glebe Weir and a pipeline from the weir to the mine.

The relevant impacts of the two water supply options being considered for the mine have been adequately assessed. Those impacts can be appropriately managed by the proponent implementing the project commitments and the environmental management plans proposed for the chosen water supply option.

The water supply options for the project will require additional development approval under the SPA and other non-SPA approvals.

Terrestrial ecology

The EIS acknowledged that the project will impact on native terrestrial plants and animals in the project area. Mitigating measures are recommended for each of the state-listed threatened species and further measures, such as habitat rehabilitation, restoration and/or offsets, are recommended to address any adverse residual impacts on these species.

Vegetation clearing would be required for all proposed project components, including the mining of the MLA areas, and the construction of the gas supply pipeline, southern coal seam methane water supply pipeline and Glebe Weir raising and pipeline. The exact footprint of all clearing areas would not be accurately defined until power and water supply options have been selected, and detailed alignments and designs have been completed.

For both the MLA areas and southern coal seam methane water supply pipeline option, the proponent plans to develop a biodiversity and land management plan before starting construction, to minimise impacts on terrestrial and aquatic ecology resulting from the construction and operational phases of the project.

For the Glebe Weir raising and pipeline option, the proponent has committed to prepare specific management plans related to terrestrial ecology that are to be included in the project construction and operational environmental management plans.

The proponent has committed to finalise and implement a biodiversity offset strategy to address the objectives of state and Commonwealth legislation and policy requirements for biodiversity offsets. The report recommends minimum offset ratios that should apply for all components of the project.

Aquatic ecology

The project's impacts on aquatic ecosystems are unlikely to be significant, provided that proposed mitigation measures are implemented. However, a condition has been imposed that the proponent must design and implement an aquatic ecosystem monitoring program including, among other things, the capability to detect if the passing streams downstream of the mine are subject to an increase in the concentration of contaminants because of inadequate flushing.

Groundwater and surface water connectivity

The report recommends that the proponent must exclude Juandah Bore from the mining leases for the project. This recommendation is made to the Queensland Minister for Mines and Energy for his consideration of the applications for mining leases for the project under the MRA.

While the proponent has undertaken preliminary investigations into the potential for connectivity between artesian groundwater and surface water, it has not proposed a strategy to mitigate any impacts that may result if identified connectivity between surface water and groundwater is impacted by mining activities. A recommendation is made to the minister responsible for administration of the Water Act that the proponent must investigate the potential for connectivity between local groundwater and surface water, including the requirement to minimise and 'make good' any adverse impacts of the mining activities on groundwater quality and quantity experienced by other groundwater users.

Greenhouse gas emissions

Consistent with the recently released CG evaluation report for the Caval Ridge coal mine, the CG believes that it would not be reasonable at this stage to impose a definitive offset requirement on the construction and operation phase of a high-volume commodity production project such as this. To mitigate the carbon footprint for both the construction and operation phases of the project, the proponent



must develop and implement a greenhouse gas reduction management plan in relation to scope 1 and scope 2 emissions of the project.

Transport impact management

A new rail spur would connect the MLA areas into the proposed Surat Basin rail line to the north of Wandoan. The Surat Basin rail line is the subject of a separate assessment process.

The proponent is considering two alternative transport options for fly-in-fly-out workers for mining operations. One option is to upgrade the existing public Taroom Aerodrome and the other is to construct a new public airstrip at Wandoan, at a location yet to be determined. In principle, the CG supports establishing a new, publicly accessible airstrip at Wandoan, subject to a separate assessment process.

The proponent must continue liaising with the Department of Transport and Main Roads and local governments to complete the infrastructure agreements, road impact assessments, road management plans and traffic management plans for approval by state and local authorities.

The report recommends that the proponent investigate the feasibility of providing enhanced fatigue and road safety training and awareness programs, in consultation with the Queensland Police Service and the Mine Safety and Health Inspectorate of Department of Employment, Economic Development and Innovation.

Cultural heritage

There will be some impacts on both Indigenous and non-Indigenous cultural heritage as a result of the project. The non-Indigenous cultural heritage affected by the project is considered important, and archival recording is being undertaken with the cooperation of the local community.

As required under the *Aboriginal Cultural Heritage Act 2003*, the proponent has developed a cultural heritage management plan in consultation with the Iman People # 2, who are the only registered native title claimants over the MLA areas. The cultural heritage management plan was approved by the then Department of Natural Resources and Water (now the Department of Environment and Resource Management) in 2009.

Social and cumulative impacts

The report addresses a range of social issues including:

- resettlement, housing and accommodation issues
- cumulative impacts
- community health, safety and wellbeing
- social infrastructure

- employment, training and economic development
- community workforce behaviour and community interaction
- Indigenous engagement.

To ensure the above issues are addressed by the proponent, the CG has imposed conditions and made recommendations, which, among other things, require the proponent to:

- finalise a social impact management plan
- continue consulting with the community
- continue working with state agencies, local government authorities and other resource industry stakeholders to develop cumulative social impact management strategies.

Matters of national environmental significance

The report provides a review of the extent to which the EIS process addresses the actual or likely impacts of the project on each of the matters protected by the controlling provisions under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

To reduce the net residual adverse impacts to EPBC-listed threatened plant and animal species and endangered ecological communities to an acceptable level, conditions are recommended to the Commonwealth Environment Minister regarding environmental offset requirements to be included in a biodiversity offset strategy to be approved by the Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

The SEIS reported that, from a survey of 52 sites, no sites potentially inhabited by the critically endangered snail were found within the directly impacted area or inundated by the Glebe Weir raising.

One community of boggomoss, located on the southern side of the Dawson River, would be inundated. The EIS predicted the impact of flooding this site on the threatened community as a whole was minor. Nonetheless, the proponent has committed to implementing a boggomoss snail habitat management plan to address any potential adverse impacts.

More information

For a full copy of the CG's report, visit <http://www.dip.qld.gov.au/projects/>

