

SECTION 6

EVALUATION OF THE PROPOSED MODIFICATION

PREAMBLE

This section evaluates the impacts of the proposed modification by consolidating and reviewing the predicted impacts on the biophysical, economic and social environment, against all relevant statutory requirements, guidelines and standards, and the principles of ecologically sustainable development (ESD).



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6.1 EVALUATION OF IMPACTS

6.1.1 Biophysical Considerations

Section 4 identified the minor adverse impacts of the project, with these largely restricted to:

- noise levels greater than the PA 05_0065 noise criteria received at the closest residences, although it is noted the noise contribution from the Invincible Colliery received at neighbouring residences and the village of Cullen Bullen would decrease from those previously experienced by surrounding neighbours;
- a minor increase in heavy vehicle traffic using the Castlereagh Highway and Boulder Road;
- minor increases in dust deposition at residences surrounding the Project Site;
- a minor increases in greenhouse gas emissions; and
- the temporary disturbance to previously rehabilitated land along the western edge of the open cut area.

The project would, however, provide several positive impacts on the biophysical environment, including:

- a reduction in the contribution of the Invincible Colliery to local noise levels as a result of the proposed mitigation measures;
- the complete rehabilitation of the open cut area to create a landform commensurate with the surrounding topography; and
- the re-establishment of the natural alignment of the identified drainage lines.

Should the proposed modification not be approved, the minor biophysical impacts identified would not occur, however, the opportunity to maximise the recovery of coal from an existing operation (thereby reducing the need for the development of other coal mines on undisturbed sites) would be lost along with the potential long term benefits to the environment through the planned rehabilitation of the Proponent.

6.1.2 Economic Considerations

The economic benefits of the project include:

- the continued supply of coal to local power stations and export markets;
- the continuation of fulltime employment for at least 15 people; and
- the payment of taxes and royalties to the NSW government.

The impacts of the proposed modification not being approved would result in loss of economic benefits to the employees of the Invincible Colliery, personnel indirectly employed by the Proponent, the communities in which these people reside, and the NSW Government.



6.1.3 Social Considerations

The Invincible Colliery is an established enterprise within the local area and the ongoing operation of which provides several benefits, namely:

- the provision of employment;
- stimulus for associated businesses; and
- the progressive rehabilitation of a currently exposed area of land adjacent to the Castlereagh Highway.

Through active participation at Community Consultative Committee meetings held every 6 months, the Proponent intends to address issues of concern to the local community, prior to them becoming detrimental to the social well-being of those potentially affected.

6.1.4 Conclusion

It has been demonstrated that the minor impacts related to noise, dust, traffic and rehabilitation associated with the proposed modification are acceptable given the proposed safeguards and management measures committed to by the Proponent (see Section 5).

6.2 ECOLOGICAL SUSTAINABILITY DEVELOPMENT

6.2.1 The Precautionary Principle

The two main issues relevant to the application of the precautionary principle relate to the following, namely:

- careful evaluation to avoid, wherever possible, serious or irreversible damage to the environment; and
- assessment of risk-weighted consequences of needs should be undertaken for various options.

The precautionary principle has been directly or indirectly addressed during the development of the proposed modification as the design was based upon the effective long term rehabilitation of the site and the use of existing infrastructure.

6.2.2 Social Equity

Social equity embraces value concepts of justice and fairness so that the basic needs of all sectors of society are met and there is a fairer distribution of costs and benefits to improve the well being and welfare of the community, both within and across generations.



The principles of social equity have been applied to the project as follows.

- Well planned and effective rehabilitation designed to restore the disturbed areas of the Invincible Colliery to a landform similar to that of the pre-mining environment.
- Disturbance to native vegetation, other than that regenerating on the rehabilitated section of the open cut would be avoided.
- The recovery and processing of coal would provide valuable economic and welfare benefit through the continued supply of coal to the Wallerawang and Mt Piper Power Stations thereby providing for continued electricity supply.
- The proposed modification, through security of access to an economical and accessible coal resource, would provide a greater level of certainty to the electricity industry with respect to the availability of an additional 150 000tpa for the life of the Invincible Colliery.

6.2.3 Conservation of Biological Diversity and Ecological Integrity

The protection of biodiversity and maintenance of ecological processes and systems are central goals of ESD. It is important that all developments do not threaten the integrity of ecological systems as a whole, or the conservation of threatened species in the short or long term. With the exception of a small area of moderately successful rehabilitation, the proposed modification would not require any additional disturbance to native vegetation. The proposed modification does, however, build on the existing plans of the Proponent to rehabilitate the disturbed areas with native vegetation.

6.2.4 Improved Valuation and Pricing of Environmental Resources

The main issues that form the basis of this principle relate to acceptance that the polluter pays, all resources are appropriately valued, cost-effective environmental stewardship is adopted and the adoption of user pays pricing scheme based upon the full life cycle of environmental costs. The proposed modification achieves this through maximising the recovery of the coal resource whilst improving the environment through effective rehabilitation of the open cut. It is planned that the pricing scheme for the coal product is sufficient to enable the Proponent to appropriately perform all of its environmentally-related tasks and responsibilities, as detailed throughout this *Environmental Assessment*.

6.3 THE “DO NOTHING” APPROACH

Under the limits PA 05_0065, there is sufficient coal reserves available to maintain production for a further 2 to 3 months. At this time, the Invincible Colliery would be placed on a care and maintenance program and rehabilitation completed as required under PA 05_0065.



The “do nothing” approach would therefore:

- result in the noise impacts attributable to the operation of the open cut mine and processing activities being temporarily ceased;
- potentially reduce the number of truck movements on the Castlereagh Highway between the Invincible Colliery and Mt Piper (where there are no adjoining residences); and
- result in a slight reduction in dust deposition levels and other particulate matter concentrations at locations immediately surrounding the Invincible Colliery.

However, a number of potential beneficial impacts associated with the proposed modification would not be achieved. These include:

- ongoing employment to Invincible Colliery personnel and the flow-on effects provided through payment of wages, payment for ancillary services and consumption of general consumables (approximately \$17M has been paid locally since commencement of operations in October 2006) and payment of contributions, taxes and royalties to the various levels of government (approximately \$3M since the commencement of operations in October 2006);
- progressive rehabilitation of the open cut mine and abandoned Cullen Main West open cut;
- reduction in noise attributable to the Invincible Colliery Processing Plant through mitigation measures; and
- maximisation of recovery of the coal resource through implementation of a low impact technology (coal augering).

In addition to these potential benefits, and with reference to the detrimental impacts that would be avoided under the “do nothing” approach, the following points are made.

- (i) Noise levels received by neighbouring properties would not increase from those currently received and would ultimately decrease given the proposed noise mitigation proposed.
- (ii) Should production from Invincible Colliery cease, Mt Piper Power Station would be required to source coal from elsewhere, with increases in heavy vehicle traffic through more populated centres, such as Cullen Bullen (should the coal be sourced from coal mines to the north) or Blackman’s Flat (should the coal be sourced from coal mines to the south), a likely possibility.
- (iii) Impacts on air quality have been monitored since re-commencement of operations in October 2006 and have been found to comply with DECC nominated criteria.

The conclusion of this assessment is therefore that the “do nothing” approach would provide little net benefit to the local and social environment while preventing the continuing or new benefits that would be provided by the approval of the proposed modification.



6.4 CONCLUSION

The proposed modification to PA 05_0065 has been designed to maximise the recovery and production of coal from the Invincible Colliery whilst minimising the impacts on the local environment and neighbouring residents. Each issue identified through consultation with the local community, NSW government agencies and review of the Director-General's Requirements were assessed to the level considered appropriate based on the level of risk to the environment posed by each. The predicted impacts associated with the proposed modification are considered generally minor and temporary in nature and as such the Minister for Planning can approve the modification because it would:

- provide for all reasonable and feasible noise mitigation to reduce noise levels received at neighbouring residences;
- with the exception of noise levels received at two residences under adverse wind conditions, comply with relevant statutory requirements, guidelines and standards;
- be operated in accordance with the environmental management measures that are detailed throughout this document and have been developed with respect to the principles of ecologically sustainable development; and
- have minimal impact on most sectors of the biophysical environment whilst allowing for the recovery of the remaining coal resource in a previously disturbed area.

Where a predicted impact has been identified, all reasonable and feasible safeguards have been implemented by the Proponent in an effort to minimise the identified impact.



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