



22 December 2011

Bulli Seam Operations – Project Application (MP 08_0150)

PROJECT APPLICATION

The Bulli Seam Operations Project seeks approval for continued and extended coal mining operations at the Appin Mine and West Cliff Colliery. Both mines are underground mines located approximately 25 kilometres northwest of Wollongong in NSW. The two mines are owned and operated by Illawarra Coal Holdings Pty Ltd (Illawarra Coal), which is a subsidiary of BHP Billiton Pty Ltd.

The main activities associated with the project (as exhibited) include:

- continued development of underground mining operations across seven separate mining domains within existing and new mining leases;
- upgrade of existing surface facilities and supporting infrastructure;
- continued and expanded placement of coal wash from West Cliff and Dendrobium washeries at the West Cliff Coal Wash Emplacement;
- continued road transport of run-of-mine (ROM) coal; and
- ongoing surface monitoring, and rehabilitation and remediation of subsidence impacts.

Illawarra Coal is seeking to extract up to 10.5 million tonnes per annum of ROM coal from the Bulli Coal Seam. The proposal would extend the life of mining operations by approximately 30 years.

The Department received the application on 27 August 2008.

COMMISSION'S PREVIOUS ADVICE

On 13 November 2009, the then Minister for Planning directed the Planning Assessment Commission to carry out a review of the subsidence related impacts of the project on significant natural features, built infrastructure and the values of Sydney's drinking water catchment. The review also required the Commission to advise on the significance and acceptability of potential impacts, make appropriate recommendations and identify and comment on any other significant issues raised in submissions or during the public hearing.

The Commission was constituted by:

- Dr Neil Shepherd (Chair);
- Professor Jeffery Bennett;
- Professor Jim Galvin;
- Dr Colin Mackie; and
- Dr John Tillears.

In February 2010, the Commission held a public hearing at Appin. 23 people spoke at the hearing, comprising two on behalf of local government authorities, 11 from special interest groups, nine from individuals and one from a mining company.

The Commission also met with State Government agencies and the proponent.

On 23 July 2010, the Commission presented its report to the then Minister for Planning the Honorable Tony Kelly MLC. The Commission raised particular concern regarding the subsidence impacts of mining within the three southern and eastern domains. The three southern and eastern domains are largely located beneath areas that are in pristine or near-pristine condition which include conservation areas under the *National Parks and Wildlife Act 1974* and parts of drinking water catchments for Sydney and Wollongong.

PREFERRED PROJECT REPORT (PPR)

To address concerns and recommendations raised in the Commission's review, Illawarra Coal submitted a PPR and additional supplementary information which amended the proposed mine plan. The PPR was submitted in three parts (Part 1 dated 24 September 2010, Part 2 dated 19 October 2010 and Part 3 dated 4 October 2011).

The PPR has removed mining operations from the majority of the three environmentally-sensitive southern and eastern mining domains including:

- the entire North Cliff and Appin Area 2 Extended domains;
- the majority of the Appin Area 3 Extended domain; and
- two proposed longwalls from the West Cliff Area 5 domain.

Approximately 40% of the originally proposed longwall mining domains were removed in the PPR. This has significantly reduced potential subsidence-related impacts on natural features.

The PPR provides the following improvements:

- The removal of potential subsidence-related impacts on upland swamps;
- The reduction of subsidence-related impacts on other key natural features, including cliffs, streams and biodiversity. As a result of the PPR, the area which is potentially subject to subsidence is 110sq.km of the overall 290sq.km project application area;
- A reduction in the number of Aboriginal heritage sites affected from 600 to 160.
- Reduced subsidence impacts on waterways of special significance identified by the Commission.
- Reduced impacts on the Dharawal State Conservation Area. The PPR excludes 98.7% of all lands within the Dharawal SCA from within the project application area. The project's impacts on the reserve would now be limited to an area of 76 ha and only first workings, continued operation of the existing West Cliff Pit Bottom, and mining of a small section of one longwall panel would be allowed to take place; and
- Reduced impacts on the Sydney Catchment Metropolitan Special Area (land protecting water quality within the drinking water catchment).

DELEGATION TO THE COMMISSION

The project was referred to the Commission for determination under the terms of the Ministerial delegation dated 14 September 2011.

Ms Gabrielle Kibble AO and Mr Joe Woodward were nominated as the Commission members for the project. Ms Gabrielle Kibble AO chaired the Commission.

Dr Neil Shepherd provided advice to the Commission concerning consistency between the Commission's earlier review report and the Department's Assessment Report. Dr Shepherd was not involved in the final decision making process.

The Director-General's referral to the Commission included the following documents:

- Illawarra Coal's Environmental Assessment;
- Illawarra Coal's Response to Submissions;
- Planning Assessment Commission Report dated 23 July 2010;
- Additional report by Dr Neil Shepherd dated 22 February 2011;
- Illawarra Coal's Response to PAC Report - Part 1 (dated 27 September 2010) and Part 2 (dated 19 October 2010);
- Illawarra Coal's Preferred Project Report Part 1 dated 24 September 2010, Part 2 dated 19 October 2010 and Part 3 dated 4 October 2011;
- Director-General's Environmental Assessment Report and recommended Instrument of Approval; and
- Copy of Public and Agency Submissions

The Commission considered that a public meeting was not necessary. The application has been through a thorough public consultation process and the Commission has previously held a public hearing on the proposal. Interested parties have been provided with sufficient opportunities to make written and verbal submissions to the Commission.

DEPARTMENT'S ASSESSMENT REPORT

On 7 December 2011, the Commission received the Director-General's Environmental Assessment Report. The report provided a detailed assessment of the issues raised by the Commission's review, including:

- Subsidence related impacts - on surface and ground water, cliffs, terrestrial ecology aquatic ecology, swamps, the Dharawal State Conservation Area, built features; and Aboriginal and Non-Aboriginal heritage; and
- Non-subsidence related impacts - including the West Cliff Coal Wash Emplacement Area, roads and traffic, air quality, noise and visual impacts.

The report also considered greenhouse gas emissions, socio-economic issues and the overall justification for the project.

The Department received a total of 81 submissions on the project comprising:

- 10 from public authorities,
- 35 from special interest groups; and
- 36 from the general public.

Of the 71 submissions received from special interest groups and the general public, 15 supported the proposal and 56 objected. The two key areas of concern included subsidence-related impacts and impacts connected to the proposed expansion of the West Cliff coal wash emplacement.

Other, issues raised during the exhibition period included:

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| • Surface Water | • Remediation |
| • Swamps | • Non-Aboriginal Heritage |
| • Flora/Fauna | • Traffic/Roads |
| • Dams | • Air/Dust |
| • Aboriginal Heritage | • Noise |
| • Greenhouse Gas | • Visual |
| • Groundwater | • Social |

The Department's report concluded that the project represents a logical development of the existing mining operations, is satisfied that its benefits outweigh its costs and is able to be carried out in a manner that is consistent with the objectives of the EP&A Act.

The Department considers the project is in the public interest and recommends the project be approved subject to conditions.

The objective of the conditions is to:

- Prevent, minimise, and/or offset adverse impacts of the project;
- Set performance measures for acceptable environmental performance;
- Ensure regular monitoring and reporting; and
- Provide for the ongoing management of the project.

MEETING WITH THE DEPARTMENT OF PLANNING

First Briefing

On 13 December 2011, the Commission met with the Department (represented by Mr Howard Reed) for a briefing on the project. The discussion focussed on the following key issues:

- Adequacy of performance measures relating to water courses, cliffs, aboriginal heritage, non-aboriginal heritage, and built features;
- The emplacement area; and
- Traffic impacts.

The Department advised that it agreed with the Commission's findings from the review of the proposal. However, the Department advised that some of the Commission's recommendations (of the earlier Commission review report) are no longer necessary, given the impacts of the proposal have been reduced by the amendments through the PPR, which has largely removed mining from the eastern and southern mining domains.

The Department advised that the proposed conditions were broadly similar to those recommended by the Commission, despite the redrafting. The redrafted conditions will largely facilitate the implementation of the Commission's earlier recommendations into the revised proposal.

On 16 December 2011, the Department submitted further information and revised conditions addressing issues raised by the Commission regarding traffic impacts, the performance criteria for heritage impacts and a review of comments received by Office of Environment and Heritage and the Department of Resources and Energy on the proposed conditions of approval.

Second Briefing

On 19 December 2011, the Commission again met with the Department. The discussion focused on;

- the performance criteria for heritage buildings;
- the need for a definition of Special Significance for Aboriginal sites; and
- minimising any subsidence under the Georges River.

On 19 December 2011, the Commission received amended conditions addressing the above issues.

COMMISSION'S COMMENTS

Performance Criteria

The Commission has carefully considered variations from the recommendations in the Commission's earlier review report and considers that these have been clearly set out and justified in the Department's assessment.

Notwithstanding, the Commission sought an explanation and rationale for key differences between the Commission's earlier review recommendations and the Department's redrafted conditions. Key differences included redrafted performance criteria for:

- Georges River;
- Cliffs;
- Heritage; and
- Built features.

Georges River

The Department advised that one of the key changes to the Commission's earlier recommendations included an amendment to the performance criteria for the Georges River. The Department considered that the Commission's recommended standard of "negligible" for the entire effected length of the river was unachievable given the Georges River is already impacted and vulnerable to subsidence, within a small defined location of the river.

The Department has drafted the performance criterion for the Georges River to allow for the possibility of "minor" environmental consequences in a small section of the river, over Longwall 5E1, which is vulnerable to subsidence. The performance criterion has been amended so that 80 percent of the effected stream length would be subject to "negligible" environmental consequences and that any other impacts or consequences are "minor".

The Department advised that while no longwall mining would occur directly under the Georges River some critical access works would be necessary under a small section of the river. The river is likely to exhibit some subsidence impacts, such as iron staining and gas releases. The performance criterion has therefore been specifically tailored to manage subsidence in this small section of the river.

The Commission noted the Department's recommendation as well as Dr Shepherd's report of 22 February 2011, and considers that a criteria of "minor", rather than "negligible", is acceptable as the river is already impacted. The Commission understands the difficulties of imposing a 100 percent target on an already impacted stream.

The redrafted performance criteria recognises critical access requirements of the proponent and will accommodate some expected subsidence impacts whilst maintaining a strong environmental performance measure for the remaining length of the effected river.

The Commission also noted that the existing mining operations currently approved under the older Subsidence Management Plan process do not contain any significant protective conditions for the Georges River. Impacts on the river will be better controlled under the proposed conditions than they are under the current arrangements.

Non Aboriginal Heritage

The Commission questioned whether the performance criteria recommended by the Department was sufficiently robust to protect the heritage value of items listed in the condition. The performance measure drafted by the Department requires a "negligible loss" of heritage value. However, the Commission queried whether a higher standard of "nil loss" might be reasonable.

The Department considered that no effective benefit would be gained by imposing a “nil” impact criteria on heritage values. The Department advised that it would be difficult to manage to a “nil” standard. The Department notes heritage items may experience some subsidence impacts which in turn may impact on heritage values. However, appropriate conditions for management and repair would protect the heritage value of these items.

The Commission considers that a higher standard of heritage protection is not warranted in this instance. The Commission accepts that it would be difficult to manage to a “nil” standard and notes that there is little difference between “nil” and “negligible” impacts in practice. The Commission therefore accepts the Department’s assessment and considers the “negligible” impact criterion is satisfactory. The Commission also notes that Extraction Plans require, Illawarra Coal to prepare a Heritage Management Plan in consultation with OEH and relevant stakeholders to manage potential heritage impacts.

Aboriginal Heritage

The Commission is satisfied that the performance measures outlined by the Department are acceptable for managing subsidence related impacts on Aboriginal Heritage.

The Commission noted that the revised performance criteria for Aboriginal heritage are stronger than that recommended by the Commission’s earlier review report. The revised condition requires less than 10 percent of sites determined to hold “high” or “moderate” significance across the mining area (as a result of studies required for Extraction Plans) be affected by subsidence (other than negligible impacts or consequences). For all other sites, less than 10 percent of such sites (or one such site, whichever is the greater) within any longwall mining domain are affected by subsidence, other than minor impacts or consequences.

Built features

The Commission is generally satisfied that the performance measures outlined by the Department are acceptable for managing subsidence related impacts on built features. However, the Commission raised concern that the proposed conditions do not include a requirement for providing reasonable time limits for remedial measures as a consequence of potential subsidence impacts.

In response, the Department has amended Condition 5(g) of Schedule 3 to provide a reference to remedial measures being undertaken in a “timely manner”. The Commission is satisfied that the revised condition is reasonable and addresses this issue.

Cliffs

The Department advised the Commission that the proposed performance criteria for the protection of cliffs was strengthened. The criteria now refers to 0.5 percent of the cliff face for cliffs of special significance and other cliffs flanking the Nepean River, rather than 0.5 percent of the cliff length, as recommended in the Commission’s earlier review report.

The Commission supports the revised performance criteria recommended by the Department. The revised condition provides a stronger performance criteria which considers impacts over the length and height of the cliff face, rather than just cliff length.

Conclusion

The Commission has carefully considered variations from the Commission’s earlier review report and considers that these have been clearly set out and justified in the Department’s assessment report. The redrafted conditions will largely facilitate the implementation of the Commission’s earlier recommendations for the revised proposal.

West Cliff Coal Wash Emplacement

The Commission noted that the reduced extent of longwall mining under the PPR has reduced the capacity, height and the footprint of the Stage 4 Coal wash emplacement area. It was further noted that Stages 1 - 3 of the Coal Wash Emplacement area have been approved and are currently processing coal wash waste.

While the total capacity of Stage 4 will be reduced from 40Mt to 26Mt, and the height reduced by 31m, the total area of cleared native vegetation has reduced only marginally from 65ha to 60ha.

The Commission noted recommended conditions include;

- management strategies for threatened species potentially affected by Stage 4, as well as a biodiversity offset strategy;
- conditions to stage the development of Stage 4 to delay and avoid impacts on significant Aboriginal sites as much as possible. Additionally, impacts on the site of "special significance" (52-2-3505) would be limited to "negligible impacts";
- progressive rehabilitation of the emplacement area, with an emphasis on natural regeneration and retention of suitable habitat species; and
- underground disposal trials, as an alternative to disposing waste product on the surface.

The Commission is satisfied that recommended conditions of approval will adequately manage the environmental impacts of the proposal, despite the revised proposal maintaining the majority of the coal wash emplacement footprint.

The Commission therefore accepts the Department's assessment in the context of the existing Coal washery (Stages 1-3) already approved and the Department's proposed conditions of approval for Stage 4 which contain strong requirements for and improved environmental management.

Traffic

The Commission raised concern about the proposed increase in vehicle movements associated with the project. The Commission sought further details from the Department to assess the impacts of the additional vehicle movements on key intersections.

The Department provided a supplementary assessment of traffic impacts on key intersections and a revised condition of approval. The Department advised that the issue of intersection upgrades will be subject to further negotiation between the RMS and the Proponent and that the Department has sought to resolve the issue through the requirement of a Traffic Management Plan.

The Traffic Management Plan requires the proponent to implement an appropriate program and schedule of works for any intersection upgrades over the life of the project. This includes an upgrade of the intersection of West Cliff Mine access road and Appin Road before an unacceptable Level of Service is reached, in accordance with RMS requirements.

The Commission accepts the Department's assessment and considers traffic impacts associated with the proposal will be adequately managed by the recommended conditions of approval.

Other issues

Agency Comments

The Department advised that it had received agency comments on the proposed conditions, after the report had been submitted to the Commission. On 16 December 2012 the

Department submitted an Annexure to the Director-General's environmental assessment report which provided an assessment of the agency comments including any amended conditions. The Department has included a revised set of conditions which include relevant agency comments.

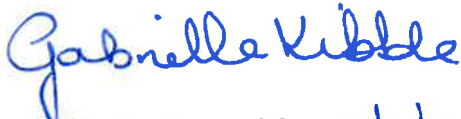
COMMISSION'S DETERMINATION

The Commission has carefully considered the Department's Assessment Report, including agency and public submissions, the recommended conditions of approval and associated documents.

The Commission notes the likely subsidence-related impacts have been reduced substantially as a result of the PPR, which removed longwall mining from nearly all 3 environmentally-sensitive eastern and southern domains. This has removed subsidence-related impacts from upland swamps and very limited (primarily negligible) subsidence impacts on waterways of special significance identified by the Commission.

The Commission is satisfied that the proposed conditions and performance criteria will adequately protect and manage impacts associated with the project.

The Commission agrees with the Department's recommendation that the proposal should be approved subject to conditions.


Gabrielle Kibble AO 22/12/11
Chair


Joe Woodward
Commission Member