

Dendrobium Coal Mine/Bulli Seam Operations Project Offset Mechanism Modification

(DA 60-03-2001 Mod 7 & 08_0150 Mod 1)

1 BACKGROUND

BHP Billiton Illawarra Coal Holdings Pty Limited (Illawarra Coal) owns and operates the Dendrobium Coal Mine and the Bulli Seam Operations Project, which are located in the Southern Coalfield, near Wollongong.

Dendrobium Coal Mine

The Dendrobium Coal Mine (Dendrobium) is located approximately 15 to 20 km west of Wollongong, in the Wollongong and Wingecarribee local government areas. Dendrobium was approved by the Minister for Urban Affairs and Planning on 20 November 2001 with three longwall mining domains (Areas 1, 2 and 3 – see Figure 1).

The Dendrobium development consent has been modified six times, and allows Illawarra Coal to:

- extract up to 5.2 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal using longwall and conventional underground mining methods until 2030;
- construct and use various surface infrastructure;
- transport ROM coal by rail to the Dendrobium Coal Preparation Plant at the Port Kembla Steelworks site for processing; and
- transport and emplace coal rejects at the West Cliff Coal Wash Emplacement Area (West Cliff Emplacement).



Figure 1: Dendrobium - Regional Context

Area 3 at Dendrobium has been divided into three zones (3A, 3B, 3C), and mining is currently occurring in Longwall 11 within Area 3B. Under the development consent (as modified), Illawarra Coal is required to submit a Subsidence Management Plan (SMP) prior to carrying out any underground mining operations that could subsidence in either Area 3A, 3B or 3C (Condition 7 Schedule 3).

On 6 February 2013, the then Director-General approved the SMP for Area 3B. The conditions of approval included a requirement to prepare and implement a Biodiversity Offset Strategy to compensate for the impacts of underground mining in Longwalls 9 to 13 (i.e. part of Area 3B). The Biodiversity Offset Strategy must also incorporate a process whereby the actual impacts of the development on upland swamps are regularly reviewed against predicted impacts, and suitable offsets provided to compensate for residual impacts. The approval also contemplated additional offset obligations for upland swamps following any approval of SMPs for subsequent longwalls in Area 3B (ie Longwalls 14 to 19).

There is also a second biodiversity offsetting obligation under the Dendrobium development consent (Condition 14 Schedule 3) that requires suitable offsets for the loss of water quality and loss of water flows to Sydney Catchment Authority (SCA) storages, vegetation clearing and any other ground disturbance (including cliff falls) that may occur as underground workings progress, and for impacts caused by surface activities within the mining area.

On 18 November 2010, the Director-General approved a 33 hectare environmental offset in the Cataract Dam catchment to satisfy this obligation under the development consent. In 2013, this land was formally transferred to the SCA. However, in approving the offset, the Department retained the right to require Illawarra Coal to provide additional offsets should any unforseen impacts occur.

Bulli Seam Operations Project

The Bulli Seam Operations Project (Bulli Seam) is a mining complex comprising the Appin Mine and West Cliff Colliery, two underground mines located approximately 25 km northwest of Wollongong (see Figure 2).

Bulli Seam was approved by the Planning Assessment Commission in 2011. The approval allows Illawarra Coal to:

- extract up to 10.5 Mtpa of ROM coal using longwall and conventional underground mining methods until 2041;
- operate a range of surface facilities to service the mine complex;
- process the coal at the West Cliff Coal Handling and Preparation Plant;
- transport up to 9.3 Mtpa of ROM coal to Port Kembla for export; and
- transport and emplace coal rejects at the West Cliff Emplacement.

This project approval also contains two biodiversity offset mechanisms.

The first offset mechanism (Condition 17 Schedule 4) requires Illawarra Coal to provide suitable biodiversity offsets to compensate for the impacts to vegetation cleared for Stage 4 of the West Cliff Emplacement. The strategy is aimed at maintaining or improving conservation outcomes for impacted vegetation communities and in particular the threatened species *Persoonia hirsuta*.

In August 2014, Illawarra Coal submitted a Biodiversity Offset Strategy to fulfil the requirement regarding the West Cliff Emplacement. The Department has accepted (in principle) that the proposed offset strategy would provide a suitable biodiversity outcome to offset the impacts of clearing at the West Cliff Emplacement. However, as the NSW Office of Environment & Heritage (OEH) retains some residual concerns about the calculations of impacts on upland swamps, the Department is yet to formally approve the proposed offset strategy.

The second mechanism (Condition 2 Schedule 3) is linked to the suite of strict subsidence performance measures to protect natural and built features in the project approval. This mechanism requires Illawarra Coal to provide a suitable offset to compensate for the impact or environmental consequence if the subsidence performance measures are exceeded and the impact is unable to be satisfactorily remediated. Any resulting offset needs to be commensurate with the level of impact or environmental consequence.



Figure 2: Bulli Seam - Regional Context

2 PROPOSED MODIFICATION

Illawarra Coal is seeking concurrent modifications (see Appendix A) to both the Dendrobium development consent (60-3-2001 Mod 7) and the Bulli Seam project approval (08_0150 Mod 1).

The proposed modifications seek to allow a more flexible biodiversity offset mechanism to apply across both projects by identifying and securing a larger strategic offset which could be used to satisfy all biodiversity offset requirements under both the Dendrobium consent and Bulli Seam approval. The strategic offset would then act as a conservation "bank" which Illawarra Coal would use to draw down to compensate for any subsidence impacts that may occur as both mines progress.

In particular, Illawarra Coal is seeking to modify the conditions to allow:

- the Secretary of the Department of Planning & Environment to accept, in respect of the offsetting obligations that may arise under either consent, an offset that exceeds the biodiversity offset values required to meet those obligation(s); and
- Illawarra Coal to be able to rely on any residual offsetting values to meet any future offsetting requirements that may arise under either approval.

In seeking these modifications, Illawarra Coal accepts that:

- the calculation of offsetting values would be as per existing requirements under both approvals; and
- additional offsets may be required if any residual offset value does not meet its obligations as they arise as both mines progress.

In practice this would mean that if Illawarra Coal elects to apply the strategic mechanism, it would first be required to quantify the conservation values of the vegetation communities of the strategic offset site. The mechanism would then allow these values to be progressively deducted from the total if an impact occurs to vegetation or other natural features in the mining area. If insufficient conservation values exist at the offset site to provide suitable compensation, an additional offset would then be required.

3 STATUTORY CONTEXT

Section 75W Modification

The modification application for Dendrobium is able to be assessed under Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This is because under Clause 8J(8)(c) of the *Environmental Planning and Assessment Regulation 2000*, a State significant development consent which was granted by the Minister under Part 4 of the EP&A Act before 1 August 2005 is considered for the purposes of modification to be an approval under Part 3A of the EP&A Act. Part 3A was repealed on 1 October 2011. However, Schedule 6A of the EP&A Act classifies the Dendrobium Mine as a 'transitional' Part 3A project, and consequently Section 75W still applies to modifications of the development consent.

Similarly, Schedule 6A of the EP&A Act classifies the Bulli Seam Operations Project as a 'transitional' Part 3A project, and Section 75W continues to apply to modifications to the project approval.

The Department is satisfied that the applications can be characterised as modifications to the existing consent/approval (rather than new projects in their own right) as the proposals relate to an administrative matter that does not affect any of the mining operations.

Approval Authority

The Minister for Urban Affairs and Planning was the consent authority for the original development application for Dendrobium, and the Minister for Planning was the approval authority for the project application for BSO. Consequently, the Minister for Planning is the approval authority for both modification applications. However, under the Minister's delegation dated 16 February 2015, the Director Resource Assessments, may determine the applications.

4. CONSULTATION

The Department made both modification applications publicly available on the Department's website, and consulted with OEH about the proposed modifications. In principle, OEH supports the proposed modifications as it would facilitate a more strategic approach to the provision of offsets for both projects.

5. ASSESSMENT

In assessing the merits of the proposed modification, the Department has considered the relevant conditions in the Dendrobium consent and Bulli Seams approval, the various biodiversity strategies submitted by Illawarra Coal for both projects, the information in the modification applications, and the requirements of the EP&A Act.

The Department considers that the existing biodiversity offset arrangements under each approval have a number of significant limitations. In particular, the current offset mechanisms do not provide sufficient flexibility to allow for upfront strategic offset areas to be identified and secured by Illawarra Coal in advance of mining, as biodiversity offsets can only be provided *after* the impacts have actually occurred.

The result is that offsets are likely to be provided in an incremental rather than in a strategic manner, with lengthy and costly administrative processes required to excise a parcel of land from a larger area in order to offset a specific impact.

Such an outcome is clearly undesirable from a regulatory and environmental perspective, as it arbitrarily fragments land and prevents the provision of strategic offsets that may provide greater biodiversity benefits to the State.

In particular, the Department considers that the proposed approach would provide a number of potential benefits including:

- upfront certainty to the NSW Government and the community about the quantum and quality of proposed offsets for two major mining projects in the Southern Coalfield;
- ensuring that offset lands are secured in advance of any resulting mining impacts on vegetation and natural features;
- allowing the integration of offset obligations across two projects which have the same owner; and
- avoiding unnecessary administrative and assessment costs involved in administering and regulating a piecemeal offsetting approach for these projects.

In expressing its support, the Department notes that the proposed mechanism is not compulsory and offsets may still be provided in accordance with the existing incremental approach. The proposed modifications also do not alter the existing offsetting obligations to compensate for the impacts of either project in terms of the size or quality of offsets that must be provided.

Furthermore, before any strategic offset is accepted, Illawarra Coal would need to calculate the biodiversity values of the offset, and if the conservation values of the offset site do not meet the relevant offsetting liabilities, or if unforeseen subsidence impacts result from mining operations, additional offsets would still need to be provided.

6. **RECOMMENDED CONDITIONS**

The Department has drafted notices of modification for the Dendrobium development consent and for the Bulli Seam project approval (see Appendix B).

The instruments allow Illawarra Coal to identify and submit strategic proposals to meet current and future offsetting requirements for both the Dendrobium and Bulli Seams projects. The Department has also taken the opportunity to make administrative updates to the Dendrobium consent and Bulli Seams approval to reflect recent changes to NSW Government agencies.

Illawarra Coal has reviewed and accepted the recommended conditions.

7. CONCLUSION

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act.

The Department considers that the proposed modifications provide a far more robust and strategic regulatory approach to developing offsets for both these projects. Importantly, the proposed approach does not weaken the existing offsetting obligations, but avoids an otherwise piecemeal approach to providing offsets which exists under the current approvals.

Consequently, the Department considers the proposed modifications have the potential to facilitate improved outcomes for biodiversity for the region, are in the public interest, and should be approved, subject to conditions.

8. **RECOMMENDATION**

It is RECOMMENDED that the A/Director Resources Assessments, as delegate of the Minister for Planning:

- consider the findings and recommendations of this report;
- determine that the modifications are within the scope of section 75W of the EP&A Act;
- approve the applications under section 75W, subject to conditions; and
- **sign** the notices of modification (Appendix B).

Paul Freeman A/Team Leader Resource Assessments

2.4.15 Mike Young

A/Director Resources Assessments

APPENDIX A: MODIFICATION APPLICATIONS

APPENDIX B: NOTICES OF MODIFICATION