

Modification of Development Consent

Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I approve the modification of the development consent referred to in Schedule 1, subject to the conditions in Schedule 2.



Jessie Evans
Director
Resource Assessments

Sydney

8 July 2022

SCHEDULE 1

Development consent:	DA 60-03-2001 granted by the Minister for Urban Affairs and Planning on 20 November 2001
For the following:	Dendrobium Underground Coal Mine and associated surface facilities and infrastructure
Applicant:	Illawarra Coal Holdings Pty Ltd
Consent Authority:	Minister for Planning
The Land:	See Appendix 1
Modification:	Gas management infrastructure

SCHEDULE 2

1. In the list of Definitions, delete the terms “DoI”, “DRG”, “EA (MOD 7)”, “EA (MOD 8)”, “Heritage Branch”, “OEH” and “RMS”, including their definitions and insert the following in alphabetical order:

BC Act	<i>Biodiversity Conservation Act 2016</i>
BCS	Biodiversity Conservation and Science Directorate within the Department
Department	Department of Planning and Environment
Development layout	The plan/s in Appendix 2 of this consent
DPE Water	The Water Group within the Department
Mining Panel	Independent Advisory Panel for Underground Mining
Modification 7	The modification to the development as described in modification application 60-3-2001 MOD 7 and accompanying letter report dated 18 March 2015 from Illawarra Coal Holdings Pty Limited
Modification 9	The modification to the development as described in the Modification Report titled “ <i>Dendrobium Mine Modification – Gas Management Infrastructure Modification Report</i> ”, dated 11 February 2022, prepared by South32 Illawarra Metallurgical Coal, “ <i>Dendrobium Mine Modification – Submissions Report</i> ”, dated 26 April 2022, prepared by South32 Illawarra Metallurgical Coal and letter titled “ <i>Dendrobium Mine Modification – Response to RFI</i> ”, dated 16 May 2022, prepared by South32 Illawarra Metallurgical Coal
Resources Regulator	NSW Resources Regulator
2. In the definition of “Modification 8”, delete “EA (MOD 8)” and replace with “the modification application dated 26 February 2018 and accompanying letter report and attachments dated 19 June 2018 from Illawarra Coal Holdings Pty Ltd”.
3. In the heading before condition 2 of Schedule 2, delete “Approval” and replace with “Consent”.
4. In condition 2(f) of Schedule 2, following (see Appendix 4);” insert “and”.
5. Delete conditions 2(g) and 2(h) of Schedule 2 and replace with:
 - (g) Modification 7, Modification 8 and Modification 9.
6. In condition 2 of Schedule 2, delete the note.
7. After condition 2A of Schedule 2, insert:

2B	The Applicant must carry out the development generally in accordance with the development layout shown in Appendix 2.
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8. In the heading before condition 5 of Schedule 2, delete “Approval” and replace with “Consent”.
9. In the note to condition 5 of Schedule 2 delete “*to the satisfaction of the Secretary and DRG.*” and insert “*in accordance with the conditions of this consent and those imposed on the mining lease(s) associated with the development under the Mining Act 1992.*”.
10. In the notes to condition 10 of Schedule 2, delete “4A” and replace with “6” and delete “*Part 8 of the EP&A Regulation*” and replace with “*Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021*”.
11. In Schedules 2, 3 and 5, delete all references to “OEH” and replace with “BCS”.
12. In Schedules 3 to 5, delete all references to “DoI” and replace with “DPE Water”.
13. In Schedules 3 and 5, delete all references to “DRG” and replace with “Resources Regulator”.
14. In Schedules 4 and 5, delete all references to “DECC” and replace with “EPA”.

15. In condition 18 of Schedule 4:
- (a) delete “The Applicant must rehabilitate the surface facilities sites to the satisfaction of DRG”;
 - and
 - (b) delete “also”.

16. After condition 18 of Schedule 4, insert:

Rehabilitation Objectives

- 18A. The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the documents listed in condition 2 of Schedule 2, and comply with the objectives in Table 7.

Table 7: Rehabilitation Objectives

Feature	Objective
All areas of the site affected by the development	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Fit for the intended post-mining land use/s • Establish the final landform and post-mining land use/s as soon as practicable after cessation of mining operations • Minimise post-mining environmental impacts
Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"> • Establish/restore self-sustaining native woodland ecosystems • Establish local plant community types • Establish: <ul style="list-style-type: none"> – riparian habitat within any diverted and/or re-established creek lines and retained water features; – habitat, feed and foraging resources for threatened fauna species; and – vegetation connectivity and wildlife corridors, as far as is reasonable and feasible
Final Landform	<ul style="list-style-type: none"> • Stable and sustainable for the intended post-mining land use/s • Integrated with surrounding natural landforms and other mine rehabilitated landforms, to the greatest extent practicable • Incorporate micro-relief and drainage features that mimic natural topography and mitigate erosion, to the greatest extent practicable
Rehabilitation materials	<ul style="list-style-type: none"> • Soil and vegetative materials from areas disturbed under this consent (including topsoils, substrates and seeds) are recovered, managed and used as rehabilitation resources
Surface facilities sites	<ul style="list-style-type: none"> • To be decommissioned and removed, unless the Resources Regulator agrees otherwise • All surface facilities sites are to be revegetated with suitable local native plant species to a landform consistent with the surrounding environment or the intended post mining land use(s)
Portals and vent shafts of the development	<ul style="list-style-type: none"> • To be decommissioned and made safe and stable • Retain habitat for threatened species (e.g. bats), where practicable
Watercourses subject to approved mine water discharges	<ul style="list-style-type: none"> • Hydraulically and geomorphologically stable • Aquatic ecology and riparian vegetation that is the same or better than prior to grant of this consent
Mine water discharges following mine closure (from any location)	<ul style="list-style-type: none"> • Negligible environmental consequence
Watercourses subject to subsidence impacts	<ul style="list-style-type: none"> • Remediate physical damage as soon as reasonably practicable, unless the environmental impacts of remediation exceed the environmental benefits

Feature	Objective
Water quality	<ul style="list-style-type: none"> • Water retained on the site is fit for the intended post-mining land use/s • Water management is consistent with the regional catchment management strategy
Built features damaged by mining operations	<ul style="list-style-type: none"> • Repair to pre-mining condition or equivalent unless the: <ul style="list-style-type: none"> – owner agrees otherwise; or – damage is fully restored, repaired or compensated for under the <i>Coal Mine Subsidence Compensation Act 2017</i>
Cliffs, minor cliffs, rock face features and steep slopes	<ul style="list-style-type: none"> • No additional risk to public safety compared to prior to mining
Community	<ul style="list-style-type: none"> • Ensure public safety • Minimise adverse socio-economic effects associated with mine closure

Progressive Rehabilitation

- 18A. The Applicant must carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.
17. Delete condition 19 of Schedule 4 and insert “Deleted”.
18. Delete condition 20 of Schedule 4 and insert:
- 20 The Applicant must prepare a Rehabilitation Management Plan for the development, in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*.
19. Delete condition 21 of Schedule 4 and insert:
- 21 The Applicant must prepare a Mine Closure Plan to the satisfaction of the Secretary. The plan must:
- (a) be prepared:
 - (i) by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
 - (ii) in consultation with the Department, WaterNSW, DPE Water, Resources Regulator, WCC and (if requested by the Secretary) the Mining Panel;
 - (iii) in accordance with any relevant Resources Regulator Guideline; and
 - (b) be subject to peer review and submitted for approval at a date agreed by the Secretary, provided that this date is at least 2 years prior to the planned cessation of mining at the site;
 - (c) include detailed consideration of best practice measures and emerging technologies to mitigate post mining greenhouse gas emissions from the mine, including consideration of how such measures will be integrated into the mine closure strategy;
 - (d) include a stakeholder engagement plan to guide mine closure planning processes and outcomes;
 - (e) investigate ways to minimise adverse socio-economic effects associated with mine closure;
 - (f) contain a detailed mine closure strategy, which includes:
 - (i) detailed consideration of all issues associated with sealing or not sealing mine entrances, with particular reference to groundwater re-pressurisation, developing hydraulic pressure heads within main headings and long-term emergence of mine waters within the Metropolitan Special Area and/or the Illawarra Escarpment;
 - (ii) consideration of other underground mines hydraulically connected to Dendrobium Mine (including options regarding isolating those other mines);
 - (iii) include details of any measures necessary to ensure that mine workings do not impact on stored waters or dams;
 - (iv) consideration of the most up-to-date groundwater and surface water inflow modelling for Dendrobium Mine, including improved modelling of points of anticipated groundwater outflow;

- (v) a robust risk assessment that fully and objectively identifies the potential hazards associated with mine closure, the likelihood and consequences associated with these hazards materialising, the extent to which consequences can be controlled should the hazards materialise, and the residual risks after control measures have been put in place; and
- (vi) options for managing residual risks, such as ongoing mine water discharges and surface leakages of contaminated mine water, should the Dendrobium Mine not be able to be effectively sealed, and any requirement for water treatment prior to discharge; and
- (g) be fully reviewed and revised every three years following approval, unless the Secretary agrees otherwise.

The Applicant must implement the Mine Closure Plan as approved by the Secretary.

Notes:

- *The Mine Closure Plan should address all land impacted by the development.*
- *The Rehabilitation Plan and Mine Closure Plan require substantial integration to achieve all objectives for the rehabilitated site.*

20. After condition 30 of Schedule 4 insert:

BIODIVERSITY

Biodiversity Credit Requirements

- 31 Unless otherwise agreed by the Secretary, the Applicant must retire the biodiversity credits specified in Table 8, prior to commencing vegetation clearing associated with Modification 9. The retirement of credits must be carried out in consultation with BCS and in accordance with the Biodiversity Offsets Scheme of the BC Act.

Table 8: Biodiversity Credit Requirements

Credit Type	Credits Require
Ecosystem Credits	
PCT 1083 - Red Bloodwood -scribbly gum heathy woodland on sandstone plateaux of the Sydney Basin Bioregion	17
Species Credits	
<i>Caladenia tessellata</i>	33
<i>Genoplesium baueri</i>	33

21. After Figure 5 in Appendix 2 insert:



Source: Geoscience Australia (2006); Department of Industry (2018);
Department Finance, Services & Innovation (2018); South32 (2021)

- LEGEND**
- Mining Lease (ML 1566)
 - Modification Component Indicative Location
 - Area to be Cleared
 - Asset Protection Zone - Vegetation Management
 - Vegetation Management



DENDROBIUM MINE
Dendrobium - Gas Management
Infrastructure General Arrangement

Figure 6 – No. 2 and 3 Shafts site layout

22. Update the Table of Contents to reflect the modification.

**End of modification
(DA 60-03-2001 MOD 9)**