



APPROVAL

Russell Vale Colliery Revised Underground Expansion Project, Russell Vale, NSW (EPBC 2020/8702)

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*. Note that section 134(1A) of the **EPBC Act** applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

Details

Person to whom the approval is granted (approval holder)	Wollongong Coal Limited
ACN of approval holder	111 244 896
Action	The extension of mining operations at the existing Russell Vale Colliery in Russell Vale, approximately 8 km north of Wollongong, NSW as described in the Assessment documentation [as described in EPBC referral 2020/8702].

Approval decision

My decisions on whether or not to approve the taking of the action for the purposes of each controlling provision for the action are as follows.

Controlling Provisions

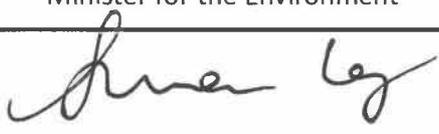
Listed Threatened Species and Communities	
Section 18	Approve
Section 18A	Approve

Coal seam gas or large coal mining development impact on water resources	
Section 24D	Approve
Section 24E	Approve

Period for which the approval has effect

This approval has effect until 31 December 2067.

Decision-maker

Name and position	The Hon Sussan Ley MP Minister for the Environment
Signature	
Date of decision	31/8/21

Conditions of approval

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

Water Resources

The objective of conditions 1 to 14 is to minimise the impacts of the action on a **water resource**.

1. For the protection of **water resources**, the **approval holder** must comply with **State development consent** conditions B12-B20, C1-C3, and C10-C11.
2. The **approval holder** must ensure there is no **adverse effect** on the **function** of a **water resource** as a result of the mining activities of the action.
3. The **approval holder** must notify the **Department** in writing of any proposed change to the **State development consent** that may relate to **protected matters** within two **business days** of formally proposing a change or within five **business days** becoming aware of any proposed change.
4. The **approval holder** must notify the **Department** in writing of any change to the **State development consent** conditions that may relate to **protected matters** within 10 **business days** of a change to conditions being finalised.
5. The **approval holder** must provide the **Department** with the final version of the **Plans** within 10 **business days** of their approval by the **NSW Planning Secretary**.
6. The **approval holder** must notify the **Department**, in writing, within two **business days** of proposing to the **NSW Planning Secretary** any changes to a version of the **Plan/s**, explaining what changes are requested and any implications for **protected matters** if the proposed changes are made. If the **NSW Planning Secretary** approves a revised version of the **Plan/s**, the **approval holder** must provide the **Department** with the approved revised **Plan/s** within 10 **business days** of its approval by the **NSW Planning Secretary**, explaining what changes have been made and any implications for **protected matters**.
7. In addition to the monitoring requirements specified in and/or required under condition B17 and condition C10 of the **State development consent**, the **approval holder** must:
 - a. establish, at least 12 months prior to any potential impact at each proposed monitoring site, and then maintain, a network of groundwater monitoring bores across the **Development Application Area** designed to detect changes in groundwater levels in all potentially **impacted** aquifers, including shallow aquifers used by **Coastal Upland Swamps**, and any changes in connectivity between aquifers;

Note: This does not apply to bores installed to inform the management of post closure adit discharges as required under the Adit Discharge Water Management Plan required under condition B19 of the **State development consent**.

- b. monitor groundwater levels as each monitoring bore (established as required under condition 7.a) at least once every three months, from installation until:
 - i. 12 months after the **cessation of mining** for all monitoring bores within **Coastal Upland Swamps**;
 - ii. five years after the **cessation of mining** for other monitoring bores excepting those required to monitor groundwater recovery and potential discharge from adits; and
 - iii. for the period for which the approval has effect for any other monitoring site required to monitor groundwater recovery and potential discharge from adits.
 - c. within 20 **business days** of the end of the three-month monitoring period, publish on the **website** and submit to the **Department**, all **monitoring data** collected in accordance with condition 7.b, updated at least once every three months to include the most recent **monitoring data**. Maintain the data on the **website** for:

- i. at least five years after the **cessation of mining** for all monitoring bores within **Coastal Upland Swamps**;
- ii. at least five years after the **cessation of mining** for other monitoring bores excepting those required to monitor groundwater recovery and potential discharge from adits; and
- iii. the period for which the approval has effect for any monitoring site required to monitor groundwater recovery and potential discharge from adits.

The **monitoring data** must include hydrographs for all bores and be accompanied by an explanation of what the data means in relation to meeting and maintenance of the **performance measures** relevant to groundwater specified in the **State development consent**;

- d. establish, at least 12 months prior to **second workings** being within 350 m (horizontal distance from the closest boundary) of each **Coastal Upland Swamp**, and maintain, in all **potentially impacted Coastal Upland Swamps**, and in multiple reference swamps that demonstrate baseline condition, monitoring capable of determining individual water balances for each **potentially impacted Coastal Upland Swamp**;
 - e. monitor all components of the network established as required under 7.d, at least once every three months from installation until at least 12 months after the **cessation of mining**;
 - f. within 20 **business days** of the end of the three-monthly monitoring period, publish on the **website** and submit to the **Department** all **monitoring data** collected in accordance with condition 7.e, updated at least once every three months to include the most recent **monitoring data**. Maintain the data on the **website** for at least five years after the monitoring program has been completed. Include an evaluation of what the data means in relation to meeting and maintenance of the **performance measures** relevant to **water resources** specified in the **State development consent**; and
 - g. include, in each **compliance report**, the **monitoring data** collected in accordance with condition 7.b and 7.e, in relation to the period covered by each **compliance report**. Include an evaluation of performance against the **performance measures** relevant to **water resources** specified in the **State development consent**.
8. In addition to the requirements specified in and/or required under condition B19 of the **State development consent**, the **approval holder** must:

- a. from the commencement of **second workings**, ensure that all water discharges to Bellambi Gully do not result in water quality within Bellambi Gully at point 11 (as shown at **Attachment D**) exceeding the *Australian and New Zealand guidelines for fresh and marine water quality (2018)*, (or any subsequent version) default guideline values for relevant metals and metalloids, as identified at **Attachment C** unless otherwise agreed in writing by the **Minister**;

Note: the **approval holder** can request that the **Minister** agree to site-specific water quality **limits** for water discharges to Bellambi Gully. Such a request must be submitted to the **department** accompanied by a **peer-reviewed** analysis of **monitoring data** from the monitoring site point 12 located upstream of the mine site as shown in **Attachment D**. Any other monitoring sites used in this analysis must have comparable catchment characteristics and must not be **impacted** by discharges or runoff from current or historic coal mines, coal storage/stockpile facilities or industrial activities. The analysis must provide data and evidence to justify the request.

- b. monitor any discharges to Bellambi Gully at least once every week, unless otherwise agreed in writing by the **Minister** at least six months after **commencement of the action**, starting within one week of the **commencement of the action** and continuing until at least 12 months after the cessation of all discharges to Bellambi Gully;

Note: the **approval holder** can request that the **Minister** agree to change the frequency of the monitoring required in condition 8.b after at least six months of weekly **monitoring data** has been collected. Such a request must be submitted to the **department** accompanied by a **peer-reviewed** analysis of **monitoring data** justifying the request.

- c. publish on the **website** and submit to the **Department** the **monitoring data** collected in accordance with condition 8.b, updated at least once every three months to include the most

recent **monitoring data** and presented graphically and compared to the **limits** identified at **Attachment C** or approved site-specific water quality **limits** for water discharges to Bellambi Gully. Maintain the data on the **website** for at least five years after the cessation of all discharges to Bellambi Gully.

- d. include, in each **compliance report**, the **monitoring data** collected in accordance with condition 8.b, in relation to the period covered by each **compliance report**. Include an evaluation of performance in achieving the currently approved water quality **limits** for water discharges to Bellambi Gully.
9. In addition to the requirements specified in and/or required under condition B19 of the **State development consent**, the **approval holder** must:
- a. provide to the **Department**, for written approval by the **Minister**, water quality **limits**, including numerical values for relevant metals and metalloids, pH, electrical conductivity, total suspended solids, and dissolved oxygen, for adit water discharges which will ensure that the requirement of condition 2 of this approval is achieved throughout the period for which the approval has effect. The suitability of the water quality **limits** must be justified by providing analysis of baseline data (from relevant locations in the receiving environment) and comparison with *Australian and New Zealand guidelines for fresh and marine water quality* (2018), or (any subsequent version) default guideline values for slightly to moderately disturbed aquatic ecosystems;
 - b. not undertake any **second workings** more than 30 months after the date of **commencement of the action** unless the water quality **limits** for adit water discharges have been approved by the **Minister** in writing;
 - c. monitor all adits at least once every month so as to detect any discharges, starting within one week of the **commencement of the action**, and monitor all adit water discharges at least once every week that discharge occurs for the period for which the approval has effect, unless otherwise agreed by the **Minister** in writing after at least six months of weekly **monitoring data** has been collected for each adit;
- Note: the **approval holder** can request to vary the frequency of the monitoring of adit discharge required in condition 9.c after at least six months of weekly **monitoring data** for each adit has been collected. Such a request must be accompanied by a **peer-reviewed** analysis of **monitoring data** justifying the request.
- d. publish on the **website** and submit to the **Department** the **monitoring data** collected in accordance with condition 9.c, updated at least once every three months to include the most recent **monitoring data**, presented graphically compared to the approved water quality **limits** for adit water discharges. Maintain the data on the **website** for the period for which the approval has effect;
 - e. include, in each **compliance report**, the **monitoring data** collected in accordance with condition 9.c, in relation to the period covered by each **compliance report**. Include an evaluation of performance in achieving the approved water quality **limits** for adit water discharges.
10. If, at any time the period for which the approval has effect, the **approval holder** detects that any water quality **limit** identified at **Attachment C**, approved site-specific water quality **limit** for water discharges to Bellambi Gully, or approved water quality **limit** for adit water discharge has been reached or exceeded the **approval holder** must notify the **Department** of the exceedance within two **business days** of detecting the exceedance.
11. If the **approval holder** detects an exceedance of any water quality **limit** identified at **Attachment C** or any approved site-specific water quality **limit** for water discharges to Bellambi Gully, the **approval holder** must cease discharges to Bellambi Gully within two **business days** and prevent any further discharge to Bellambi Gully.
12. If the **approval holder** has been required to cease discharges to Bellambi Gully pursuant to condition 11, discharges must not recommence until the **approval holder** provides **monitoring**

data which demonstrates, and the **Minister** agrees in writing, that the water quality **limits** at **Attachment C** or the approved site-specific water quality **limits** for water discharges to Bellambi Gully are no longer being reached or exceeded, or it can be demonstrated that **new or increased impacts** will not occur.

13. The **approval holder** must prevent any adit water discharge that reaches or exceeds any approved water quality **limit** for adit water discharge from entering any waterway within two **business days** of detecting an exceedance of any approved water quality **limit** for adit water discharge and commence treatment of all adit discharge water to bring it within the approved water quality **limits** for adit water discharge.
14. If adit water discharge must be prevented from entering a waterway pursuant to condition 13, the adit water discharge must not be discharged to a waterway until the **approval holder** provides **monitoring data** which demonstrates, and the **Minister** agrees in writing, that the approved water quality **limits** for adit water discharge are no longer being reached or exceeded.

Listed threatened species and ecological communities

The objective of conditions 15 to 18 is to minimise, and if necessary, compensate for, the impacts of the action on **Listed threatened species and ecological communities**.

15. In addition to the monitoring requirements specified in and/or required under condition C10 of the **State development consent**, the **approval holder** must:
 - a. undertake surveys prior to the **commencement of the action**, using a method consistent with the requirements of condition C2 of the **State development consent**, to determine the baseline condition in relation to subsidence at each **potentially impacted Coastal Upland Swamp**;
 - b. monitor for, and measure any, vertical subsidence using an approach consistent with the requirements of condition C2 of the **State development consent**, at least weekly at any **potentially impacted Coastal Upland Swamp** when **second workings** are within 350 m (horizontal distance from the closest boundary) of the particular **Coastal Upland Swamp**, starting at least one week prior to the commencement of **second workings** within 350 m of the particular **Coastal Upland Swamp** and continuing until at least 12 months after the **cessation of mining**;
 - c. publish on the **website** and submit to the **Department** the **monitoring data** collected in accordance with condition 15.b, updated at least once every three months to include the most recent **monitoring data**, and accompanied by an evaluation of the risk of the **subsidence limit** being reached or exceeded. Maintain the data and evaluation on the **website** for at least 5 years after the **cessation of mining**;
 - d. include, in each **compliance report**, the **monitoring data** collected in accordance with condition 15.b, in relation to the period covered by each **compliance report**. Include an evaluation of the risk of any **subsidence limit** being reached or exceeded.
16. If, at any time during the period for which the approval has effect, the **approval holder** detects that any **subsidence limits** have been reached or exceeded the **approval holder** must cease **second workings** and notify the **Department** of this within two **business days** of detecting the exceedance.
17. If the **approval holder** has been required to cease **second workings** pursuant to condition 16, the **approval holder** must not recommence **second workings** until it can be demonstrated that **new or increased impacts** will not occur and the **Minister** approves, in writing, the recommencement of **second workings**.
18. If the **approval holder** exceeds the **performance measure** required by **State development consent** condition C1, and the **NSW Planning Secretary** determines that an offset is required under **State development consent** condition C4, the **approval holder** must provide the **Department** with

details of the offset(s) approved by the **NSW Planning Secretary** within 10 **business days** of the approval by the **NSW Planning Secretary**.

Part B – Standard administrative conditions

Notification of date of commencement of the action

19. The **approval holder** must notify the **Department** in writing of the date of **commencement of the action** within 10 **business days** after the date of **commencement of the action**.
20. The **approval holder** must notify the **Department** in writing, within 10 **business days** of **cessation of mining**.

Compliance records

21. The **approval holder** must maintain accurate and complete **compliance records**.
22. If the **Department** makes a request in writing, the **approval holder** must provide electronic copies of **compliance records** to the **Department** within the timeframe specified in the request.

Note: **Compliance records** may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department's** website or through the general media.

Submission and publication of plans

23. The **approval holder** must:
 - a. submit any **plans** required by these conditions electronically to the **Department** within 10 **business days** of being approved by the **NSW Planning Secretary**;
 - b. publish each **plan** on the **website** within 20 **business days** of the date the **plan** is approved by the **NSW Planning Secretary**, unless otherwise agreed to in writing by the **Minister**;
 - c. exclude or redact **sensitive ecological data** from **plans** published on the **website** or provided to a member of the public; and
 - d. keep **plans** published on the **website** until the end date of this approval.
24. The **approval holder** must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under a **plan** or conditions of this approval, is prepared in accordance with the **Department's Guidelines for biological survey and mapped data** (2018) and submitted electronically to the **Department** in accordance with the requirements of the **plan** or within 10 **business days**.

Annual compliance reporting

25. The **approval holder** must by the end of each 12-month period following the date of **commencement of the action**, or as otherwise agreed to in writing by the **Minister**, prepare a **compliance report**. The **approval holder** must:
 - a. publish each **compliance report** on the **website** within 60 **business days** following the end of the 12-month period for which that **compliance report** is prepared;
 - b. notify the **Department** by email that each **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within five **business days** of the date of publication of each **compliance report**;
 - c. keep all **compliance reports** publicly available on the **website** until this approval expires;
 - d. exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**; and

- e. where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication on the **website**.

Note: This approval decision requires that a **compliance report** be submitted every year until the end date of this approval because data from monitoring of discharge from adits must be submitted until at least 2067. **Compliance reports** may be published on the **Department's** website.

Reporting non-compliance

26. The **approval holder** must notify the **Department** in writing of any: **incident**; non-compliance with the conditions; or non-compliance with the commitments made in **plans**. The notification must be given as soon as practicable, and no later than two **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:
 - a. any condition which has been or may have been in breach;
 - b. a short description of the **incident** and/or non-compliance; and
 - c. the location (including co-ordinates), date, and time of the **incident** and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.
27. The **approval holder** must provide to the **Department** the details of any **incident** or non-compliance with the conditions or commitments made in **plans** as soon as practicable and no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:
 - a. any corrective action or investigation which the **approval holder** has already taken or intends to take in the immediate future;
 - b. the potential impacts of the **incident** or non-compliance; and
 - c. the method and timing of any remedial action that will be undertaken by the **approval holder**.

Independent audit

28. The **approval holder** must ensure that an **independent audit** of compliance with the conditions is conducted for the three-year period from the date of this approval and subsequently for every three-year period for the life of the approval, or as otherwise requested in writing by the **Minister**.
29. For each **independent audit**, the **approval holder** must:
 - a. provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;
 - b. only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**; and
 - c. submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.
30. The **approval holder** must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

Completion of the action

31. Within 20 **business days** prior to the period for which the approval has effect the **approval holder** must submit all **completion data** to the **Department**.

Part C - Definitions

In these conditions, except where contrary intention is expressed, the following definitions are used:

Adverse effect means the occurrence of **impacts** greater than those predicted in the **assessment documentation** and is represented by the exceedance of an approved **limit**.

Approval holder means the person to whom the approval is granted as identified on the approval notice for EPBC 2020/8702 or to whom the approval is transferred under s 145B of the **EPBC Act**, or a person who may take the action in accordance with section 133(2A) of the **EPBC Act**.

Aquatic GDEs means groundwater dependent ecosystems dependent on the surface expression of groundwater, including:

- River baseflow systems, aquatic and riparian ecosystems that exist in or adjacent to streams (including the hyporheic zone (subsurface interface between surface and groundwater bodies)) which are fed by groundwater; and
- Wetlands (aquatic communities and fringing vegetation dependent on groundwater-fed lakes and wetlands), including palustrine (non-tidal wetlands dominated by vegetation) and lacustrine (lake) wetlands that receive groundwater discharge, and can include spring and swamp ecosystems.

Assessment documentation means the Final Public Environment Report, Russell Vale Colliery Revised Underground Expansion Project (EPBC 2020/8702) prepared by Umwelt (Australia) PTY Ltd dated April 2021 and attachments.

Associated user means groundwater supply bores, **aquatic GDEs**, **terrestrial GDEs** and **subterranean GDEs**.

Bord and pillar workings means a mining method comprising of a series of self-supporting roadways (or bords) within the coal seam leaving a grid of pillars of unmined coal which are designed to remain stable for the long term.

Business day means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

Cessation of mining means the completion of **second workings** and the placement of waste rock in mine workings.

Coastal Upland Swamp/s means the **EPBC Act** listed Coastal Upland Swamps in the Sydney Basin Bioregion.

Commencement of the action means the first instance of any specified activity associated with the action. **Commencement of the action** does not include minor physical disturbance necessary to

- i. install signage and /or temporary fencing to prevent unapproved use of the project area;
- ii. protect environmental and property assets from fire, weeds, and pests, including the erection of **construction** of fencing, and maintenance of existing surface access tracks;
- iii. install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no impact on the **protected matters**;
- iv. monitoring programs; and
- v. undertaking geotechnical investigation if it causes only minor physical disturbance and is required well in advance of most of the site works to inform design.

Completion data means an environmental report and spatial data clearly detailing how the conditions of this approval have been met. The **Department's** preferred spatial data format is **shapefile**.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the **approval holder's** possession or that are within the **approval holder's** power to obtain lawfully.

Compliance reports mean a written report of compliance with and fulfilment of the conditions attached to the approval. Each compliance report must be consistent with the **Department's Annual Compliance Report Guidelines (2014)** and separately report the following in respect of:

- a. the 12-month period at the end of which that **compliance report** is prepared:
 - i. accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
 - ii. a schedule of all **plans** prepared and in existence in relation to the conditions during the 12-month period at the end of which the **compliance report** is prepared.
- b. the period from the date of **commencement of the action**, until the end of the 12-month period at the end of which that **compliance report** is prepared:
 - i. accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**
 - ii. a schedule of all **plans** in existence in relation to the conditions.

Department means the Australian Government agency responsible for administering the **EPBC Act**.

Development Application Area means the area enclosed by the red line labelled 'UEP Application Area' in **Attachment A**.

EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.

First Workings means development of mains headings, gate roads, related cut throughs and other workings for mine access and ventilation only.

Function means the ecosystem components, processes and benefits or services that characterise the **associated user**, including support for biological diversity or species composition.

Impacted means having any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the action.

Incident means any event which has the potential to, or does, impact on one or more **protected matter** except as permitted by this approval.

Independent means a person who does not have any individual, or by employment or family affiliation, conflicting or competing interests with the **approval holder**; the **approval holder's** staff, representatives or associated persons; or the project, including any personal, financial, business or employment relationship, other than receiving payment for undertaking the role for which the condition requires an independent person.

Independent audit: means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2019)*.

Independent suitably qualified water resources expert means an **independent** person with at least a postgraduate degree (or equivalent) in a suitable area (such as hydrology or hydrogeology) and a minimum of 10 years relevant experience in **water resources** assessment, include at least one year of experience in Australia.

Limit means a specified numerical value that, should it be reached or exceeded, means impacts greater than those predicted in the **assessment documentation** will occur or are occurring.

Listed threatened species and ecological communities means Macquarie Perch (*Macquaria australasica*), Silver Perch (*Bidyanus bidyanus*), Prickly Bush-pea (*Pultenaea aristata*), Giant Burrowing Frog (*Heleioporus australiacus*), Littlejohn's Tree Frog (*Litoria littlejohni*), Stuttering Frog (*Mixophyes balbus*), Broad headed snake (*Hoplocephalus bungaroides*), Large-eared pied bat (*Chalinolobus dwyeri*) and Coastal Upland Swamps in the Sydney Basin Bioregion endangered ecological community listed under the **EPBC Act**.

Monitoring data means the data required to be recorded under the conditions of this approval.

Minister means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.

New or increased impacts means a new or increased environmental impact or risk relating to **Coastal Upland Swamps** or aquatic ecosystems, resulting from the action, when compared to the likely impacts of the action as assessed in the **assessment documentation**.

NSW Planning Secretary means the Planning Secretary under the *Environment Planning and Assessment Act 1979* (NSW), or nominee.

Plan/s means the Water Management Plan required under condition B17, Adit Discharge Water Management Plan required under condition B19 and Extraction Plan required under condition C10 of the **State development consent** and approved by the **NSW Planning Secretary**.

Peer-reviewed means a review carried out by an **independent suitably qualified water resources expert**.

Performance measure means as specified in Tables 4 and 6 of the **State development consent** and as defined in the Water Management Plan and Extraction Plan approved by the NSW Government.

Potentially impacted means, in relation to **Coastal Upland Swamps**, those located partially or wholly within 350 metres, measured horizontally, from any underground mining activity. This refers to any swamp (shaded in burgundy designated 'Swamps'), part or all of which is shown inside the yellow dashed line designated as '350 m Offset from Bord and Pillar workings', in the map at **Attachment B**.

Protected matter means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect, being **water resources** and **listed threatened species and ecological communities**.

Sensitive ecological data means data as defined in the Australian Government Department of the Environment (2016) *Sensitive Ecological Data – Access and Management Policy V1.0*, or as subsequently officially revised.

Shapefile means location and attribute information of the action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

Second workings means extraction of coal from **bord and pillar workings** but does not include **first workings**.

State development consent means the Development Consent issued by the Independent Planning Commission of New South Wales for application number MP09_0013 dated 8 December 2020.

Subsidence limit means a vertical subsidence of 100 mm at any **Coastal Upland Swamp** when compared to the baseline condition determined under condition 15.a.

Subterranean GDEs means groundwater dependent ecosystems partially or wholly dependent on aquifer ecosystems, including stygofauna.

Suitably qualified person means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative **independent** assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature

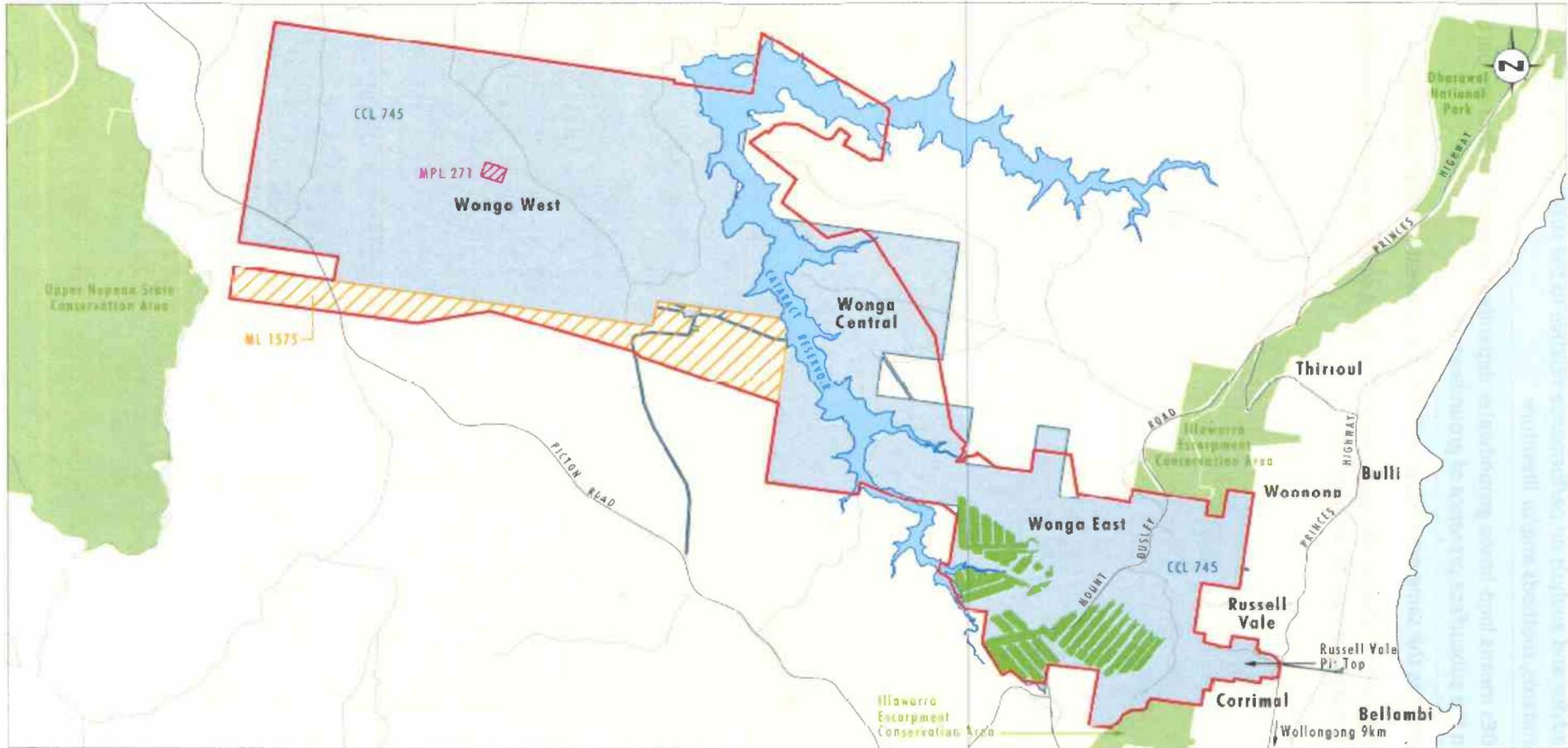
Terrestrial GDEs means land-based groundwater dependent ecosystems that are partially or wholly dependent on the subsurface presence of groundwater.

Water Resource has the same meaning as in the Commonwealth *Water Act 2007*.

Website means a set of related web pages located under a single domain name attributed to the **approval holder** and available to the public.

ATTACHMENTS

Attachment A – Development application area is outlined in red and identified as UEP application area.



Data Source: Wollongong Coal (2020), OEH (2013)

- Legend**
- UEP Application Area
 - Proposed Action Mine Plan
 - CCL 745
 - ML 1575
 - MPL 271

FIGURE 2.1
Russell Vale Colliery Mining Lease Areas

Attachment B – Coastal Upland Swamps shaded in burgundy

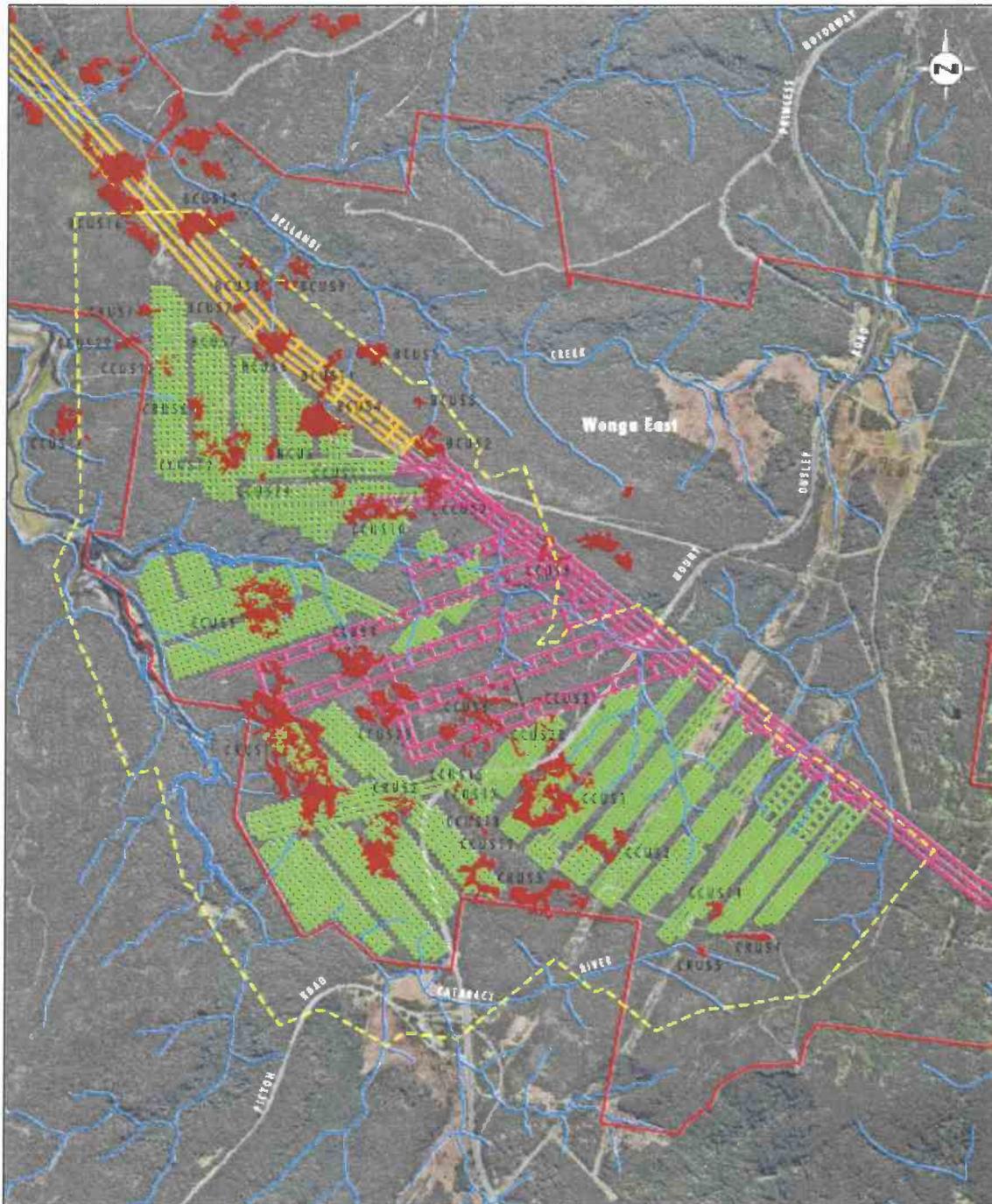
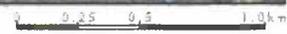


Image Source: Neermax (Oct 2018)
 Data Source: Wallongong Coal (2020), SET Operations (2020)



Legend

- UEP Application Area
- Proposed Access Mine Plot
- Existing Wongawilli Seam Workings
- Approved Wongawilli Development Works
- 150m Offset from Bore and Pillar Workings
- Swamps
- Drainage Line

Coastal Upland Swamps within 350m of Proposed Bore and Pillar Workings in Wongawilli Seam

Attachment C – water quality limits for Bellambi Gully (based on ANZG 2018 default guideline values).

Metal/metalloid	Limit (mg/L)	Level of protection
Aluminium (Al) pH>6.5	0.150	80%
Aluminium (Al) pH <6.5	0.0008	Unknown
Antimony (Sb)	0.009	Unknown
Arsenic (As) ¹	0.140	80%
Boron (B)	1.300	80%
Cadmium (Cd)	0.0008	80%
Chromium (Cr) ²	0.0033	Unknown
Cobalt (Co)	0.150	80%
Copper (Cu)	0.0025	80%
Lead (Pb)	0.0094	80%
Manganese (Mn)	3.600	80%
Molybdenum (Mo)	0.0340	Unknown
Mercury (Hg)	0.0054	80%
Nickel (Ni)	0.0170	80%
Selenium (total) (Se)	0.0340	80%
Silver (Ag)	0.0002	80%
Thallium (Tl)	0.00003	Unknown
Vanadium (V)	0.006	Unknown
Zinc (Zn)	0.031	80%

¹total As concentration if speciation not determined. If speciation undertaken As (III) limit is 0.360 mg/L and As (V) limit is 0.140 mg/L.

²total Cr concentration if speciation not determined. If speciation undertaken Cr (III) limit is 0.0033 mg/L and Cr (VI) limit is 0.040 mg/L.

Attachment D - Location of monitoring points 11 and 12, identified by red asterisk and number (source EPL 12040, dated 6 May 2019).

