

# WHC Vickery Mine – Biodiversity Offset Strategy: FINAL Retirement of Credits Status Report #4

April 2024



# FINAL Retirement of Credits Status Report Summary:

- Vickery Coal Mine (VCM) BOS Credit Liability:
  - SSD-7480 Approved 12 August 2020
  - EPBC 2016/7649 App. 19 Sept 2021
  - Reasonable equivalence conversion



# Vickery Coal Mine BOS Credit Liability

SSD-7480 Approved 12 August 2020 (Attachment 1)

Credits to be retired were generated in accordance with NSW Biodiversity Offsets Policy for Major Projects:

## Additional Biodiversity Offsets Required – Vickery Extension Project

- B58. In addition to the biodiversity offset requirements in Table 9, within 2 years of the date of commencement of development under this consent, unless otherwise agreed by the Planning Secretary the Applicant must retire biodiversity credits of a number and class specified in Table 10 and Table 11 below to offset the biodiversity impacts of the development.
- B59. The retirement of these credits must be carried out in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* and can be achieved by acquiring or retiring 'biodiversity credits' within the meaning of the BC Act.

**Table 10: Ecosystem credit requirements**

Ecosystem credits	Code (BVT)	Code (PCT)	Credits Required
Poplar Box Woodland on Alluvial Clay Soils	NA185	101	3,540
Pilliga Box – Poplar Box Shrubby Woodland	NA324	397	6,955
White Box – Silver-leaved Ironbark Shrubby Open Forest	NA349	594	1,795
Narrow-leaved Ironbark – White Box Shrubby Forest	NA311	459	4,025
Mixed Marsh Sedgeland	NA201	53	46
River Red Gum Riparian Tall Woodland	NA193	78	40

**Table 11: Species credit requirements**

Species	Credits Required
Regent Honeyeater ( <i>Anthochaera phrygia</i> )	3,703
Squirrel Glider ( <i>Petaurus norfolcensis</i> )	1,672
Koala ( <i>Phascolarctos cinereus</i> )	1,308

### Notes:

- The credits in Table 10 and Table 11 were calculated in accordance with Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEHL, 2014) and would need to be converted to reasonably equivalent 'biodiversity credits', within the meaning of the BC Act, if the credits are to be retired in accordance with the Biodiversity Offsets Scheme of the BC Act. Under this conversion the species credits for the Regent Honeyeater would be converted to ecosystem credits.
- Following repeal of the Threatened Species Conservation Act 1995 on 25 August 2017, credits created under that Act are taken to be "biodiversity credits" under the Biodiversity Conservation Act 2016 by virtue of clause 22 of the Biodiversity Conservation (Savings and Transitional) Regulation 2017.

If Credits to be retired using contemporary NSW BOS under the Biodiversity Conservation Act would need to be converted to "Biodiversity Credits"

SSD 7480 development commenced on 28 April 2022.

Retirement of Credits required for SSD 7480 within 2 years i.e. 28 April 2024.

# Vickery Coal Mine BOS Credit Liability

EPBC 2016/7649 Approved 19 September 2021 (Attachment 2)

Commonwealth requirements mirror NSW SSD-7480 conditions including for Credit Retirement:

- Condition 19 is aligned with SSD-7480 Condition B58/B59;
- Condition 20 is **THIS FINAL REPORT** on Vickery Mine Retirement of Credits Status;
- Condition 21 has been addressed by:
  - A Report (submitted 5 September 2022) stated that the minimum area of potential Regent Honeyeater and Koala habitat was met by the secured Willeroi East Offset Area/Conservation Agreement;
  - Substituted Offset Areas were approved under SSD-7480 Condition B56 on 14 March 2024 with the Vickery Revised Biodiversity Offset Strategy provided to the Commonwealth on 15 March 2024 updating the approved land based offsets in accordance with this condition and outlining the total area of Koala and Regent Honeyeater habitat provided by the Willeroi East Offset Area/Conservation Agreement.

16. The **approval holder** must comply with the **State development consent** conditions B56 - B67, and B101 - B106 (to the extent these conditions relate to **EPBC Act** listed **threatened species**).

17. The **approval holder** must notify the Department in writing, within 2 **business days** if they apply to modify **State development consent** conditions B56 – B67 and B101-B106.

18. The **approval holder** must notify the Department in writing, within 10 **business days**, where **State development consent** conditions B56 – B67 and B101-B106 have been modified.

19. To compensate for **impacts** on threatened species and communities listed in condition 15, the **approval holder** must comply with **State development consent** conditions B56 and B57 and must retire the biodiversity credits specified in table 10 and 11 of **State development consent** conditions B58 and B59.

20. The approval holder must publish a credit retirement report within 10 **business days** of retiring the credits on the **approval holder's** website.

21. The **approval holder** must provide the Minister with a statement, prior to the **commencement of the action** validating that the approved land based offsets specified in Table 9 of the **State development consent** contain at least 293.9 ha of potential Regent Honeyeater (*Anthochaera phrygia*) habitat (the equivalent of 2087 species credits) and 112 ha of potential Koala (*Phascolarctos cinereus*) habitat (the equivalent of 795 species credits). The statement must be endorsed by an accredited assessor under the *NSW Biodiversity Conservation Act 2016* and must be published on the **approval holder's** website.

Note: The equivalent credits in condition 21 were calculated in accordance with the Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEH, 2014).

EPBC Commencement of Action was 27 February 2023.



# Vickery Coal Mine BOS Credit Liability

## Credits BBAM to BAM reasonable equivalence conversion (Attachment 3)

Application to convert to NSW BOS under BC Act was made 27 June 2022. Statement of Reasonable Equivalence for Biodiversity Credits was reissued with corrections on 7 October 2022:



### Statement of assessment of reasonable equivalence of biodiversity credits

A delegate of the Environment Agency Head of the Department of Planning and Environment has determined that the number of biodiversity credits required to be retired under the *Threatened Species Conservation Act 1995 (TSC Act)* as part of the development consent listed in Part 1, are reasonably equivalent to the number and class of biodiversity credits under the *Biodiversity Conservation Act 2016 (BC Act)* set out in Part 2.

This document outlines that determination, made in accordance with clause 22(3) of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*.

#### Part 1 Existing statutory obligation to retire credits

Request made by:	Vickery Coal Pty Ltd (ABN 68 124 425 396)
Date request received	27 June 2022
Development Consent reference	SSD7480
Development name	Vickery Extension Project

Existing statutory obligation reference	Biodiversity credit name (Plant Community Type name and ID, or threatened species name)	IBRA sub region	Number of credits
SSD 7480	Narrow-leaved Ironbark - Black Cypress Pine - White Box shrubby woodland in sedimentary hills of the Gunnedah region, Brigalow Belt South Bioregion (NA311)	Liverpool Plains (Part B)	4025 or 3156 <sup>1 2</sup>
SSD 7480	Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warralda region, Brigalow Belt South Bioregion (NA324)	Liverpool Plains (Part B)	6955 or 2964 <sup>3 4</sup>

<sup>1</sup> Credit obligation from 0059/2018/4751MP  
<sup>2</sup> The applicant intends to retire 800 credits from Biobanking Agreement 43 in the future (DOC22/612474). This Statement of Reasonable Equivalence provides a credit equivalence for both scenarios: if these credits are retired from Biobanking Agreement 43, and if no credits are retired from a Biobanking Agreement.  
<sup>3</sup> Credit obligation from 0059/2018/4749MP and 0059/2018/4751MP  
<sup>4</sup> Condition 60B allows for 3,091 credits from this obligation to be created through mine site rehabilitation (DOC22/612474). This Statement of Reasonable Equivalence provides a credit equivalence for both scenarios: if these credits are created through mine site rehabilitation, or if all credits are met through equivalent BAM obligation.

#### Species Credits

1.Name of threatened species: Regent Honeyeater (*Anthochaera phrygia*)

Number of species credits required	0 <sup>25</sup>
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2.Name of threatened species: Koala (*Phascolarctos cinereus*)

Number of species credits required	1,308 <sup>26</sup>
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3.Name of threatened species: Squirrel Glider (*Petaurus norfolcensis*)

Number of species credits required	1,672 <sup>27</sup>
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This statement was issued on 7 October 2022.

Authorised by:

*A Dumbrell*

AMY DUMBRELL  
A/Director Biodiversity Offsets Scheme  
Department of Planning Industry and Environment  
Delegate of the Environment Agency Head

<sup>25</sup>Regent Honeyeater is now considered a dual species credit species under the BAM, with 'species credit' habitat being as per mapped important areas. There are no mapped important areas in the project area, therefore the equivalent number of BAM credits for this species is 0.  
<sup>26</sup>There are 18,503 matching credits are available on the public register of biobanking credits for Koala in 22 Biobanking Agreements including BA308 and BA228. In accordance with the approved method, a full recalculation of credit numbers for Koala credits was not undertaken.  
<sup>27</sup>There are 7,193 matching credits are available on the public register of biobanking credits for Squirrel Glider (*Petaurus norfolcensis*) in 11 Biobanking Agreements including BA228 and BA449. In accordance with the approved method, a full recalculation of credit numbers for Squirrel Glider credits was not undertaken.

BVT Ecosystem Credits	BBAM Credits SSD 7480 12 Aug 2020	PCT Ecosystem Credits	Threatened Ecological Community	Hollow Bearing Tree Type Credits	DPE Conversion BAM Credits 7 Oct 2022
NA185	3540	101	No	Yes	850
		101	No	N/A	1183
NA324	6955 (not including use of Mine Rehab Credits)	397	No	Yes	610
		397	No	N/A	1974 (if no Mine Rehab credits used)
NA349	1795	594	No	Yes	651
		594	No	N/A	252
NA311	4025 (3156 if 869 credits retired in BA43)	459	No	Yes	223 (or 593 if no BA43 retirement)
		459	No	N/A	914
NA201	46	53	No	N/A	22
NA193	40	78	No	Yes	20
TOTAL	16,401				6,699

Species Credits	BBAM Credits SSD 7480 12 Aug 2020	DPE Conversion BAM Credits 7 Oct 2022
Regent Honeyeater ( <i>Anthochaera phrygia</i> )	3,703	0
Squirrel Glider ( <i>Petaurus norfolcensis</i> )	1,672	1,672
Koala ( <i>Phascolarctos cinereus</i> )	1,308	1,308
TOTAL	6,683	2,980



# FINAL Retirement of Credits Status Report Summary:

- FINAL Retirement of Vickery Credit Liability in accordance with SSD-7480 Conditions B58, B59 and **THIS FINAL Six Monthly REPORT B62**
- FINAL Retirement of Vickery Credit Liability in accordance with EPBC 2016/7649 Condition 20 **THIS FINAL REPORT**

## Additional Biodiversity Offsets Required – Vickery Extension Project

- B58. In addition to the biodiversity offset requirements in Table 9, within 2 years of the date of commencement of development under this consent, unless otherwise agreed by the Planning Secretary the Applicant must retire biodiversity credits of a number and class specified in Table 10 and Table 11 below to offset the biodiversity impacts of the development.
- B59. The retirement of these credits must be carried out in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* and can be achieved by acquiring or retiring 'biodiversity credits' within the meaning of the BC Act.

## Retirement of Credits Status Reports

- B62. From the date of commencement of development under this consent until the credit requirements have been retired, the Applicant must submit a six monthly report to the Department on progress towards retirement of credits required in Table 10 and Table 11.

20. The approval holder must publish a credit retirement report within 10 **business days** of retiring the credits on the **approval holder's** website.



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# FINAL Retirement of Vickery Credit Liability

## Methods used for Credit retirement to address Vickery SSD & EPBC Approvals:

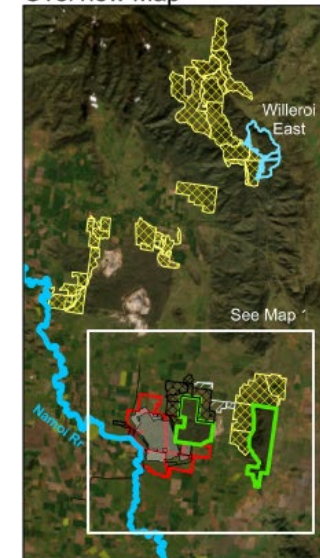
1. Biodiversity Credits generated from Biodiversity Stewardship (BS) Agreements approved on Whitehaven Coal owned properties (or subsidiaries of WHC entities) to be retired towards Vickery Coal Mine were:
  - Biodiversity Credits Retired from Yarrari & Belah Biobanking Agreement (BA) 43 (Retirement #1);
  - Biodiversity Credits Retired from Mt Somner BS0071 (Retirement #2);
  - Biodiversity Credits Retired from Wean Amalgamated BS0145 (Retirement #3);
  - Biodiversity Credits Retired from Greenwood BS0143 (Retirement #4);
  - Biodiversity Credits Retired from Blue Vale BS0144 (Retirement #5);
2. Biodiversity Credits transferred (purchased) from third party entities by Whitehaven Coal to be retired towards Vickery Coal Mine were:
  - Biodiversity Credits Retired from transfer by NSW Credit Supply Taskforce (CST) (Retirement #6);
3. Payment to Biodiversity Conservation Fund (BCF) to satisfy the obligation to retire Biodiversity Credits towards Vickery Coal Mine (Retirement #7).



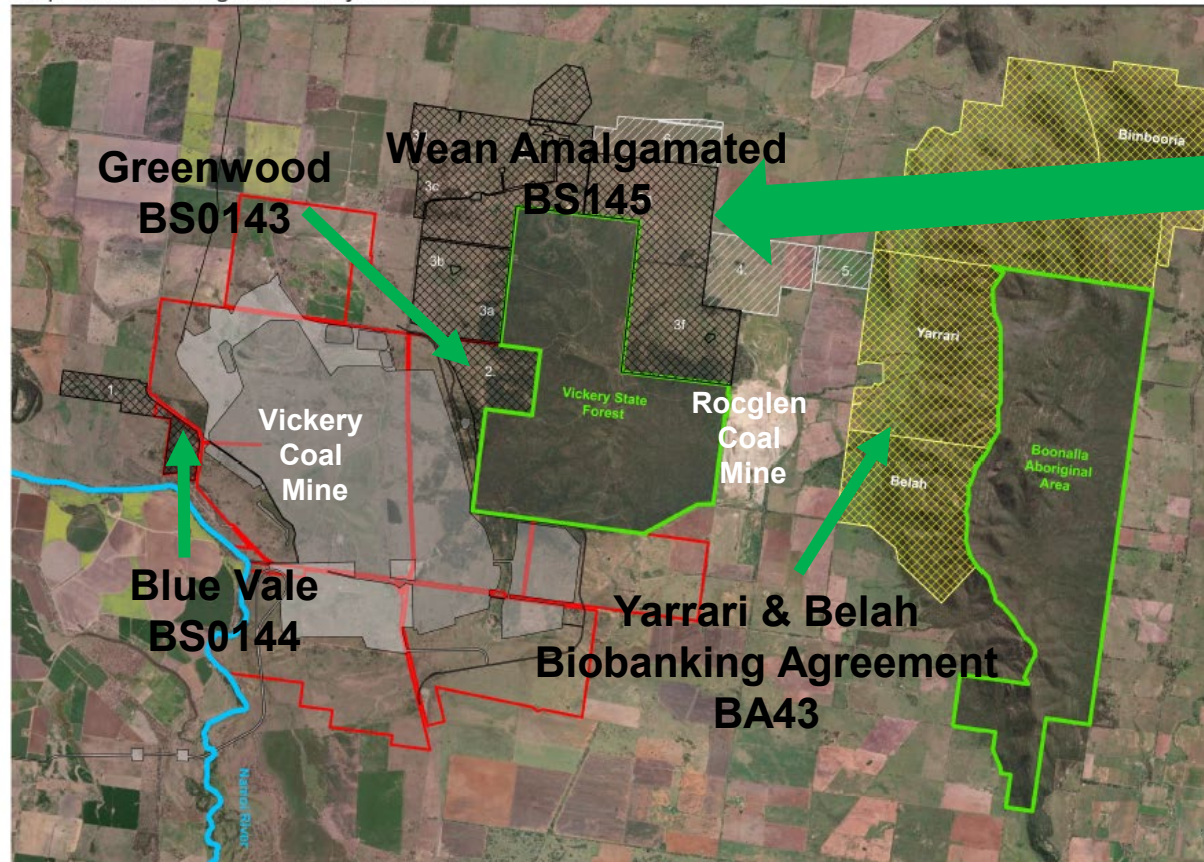
# Location of WHC Biodiversity Stewardship (BS) Agreements Used to Retire Credits against Vickery Mine:

## VICKERY BOS APPROACH

### Overview Map

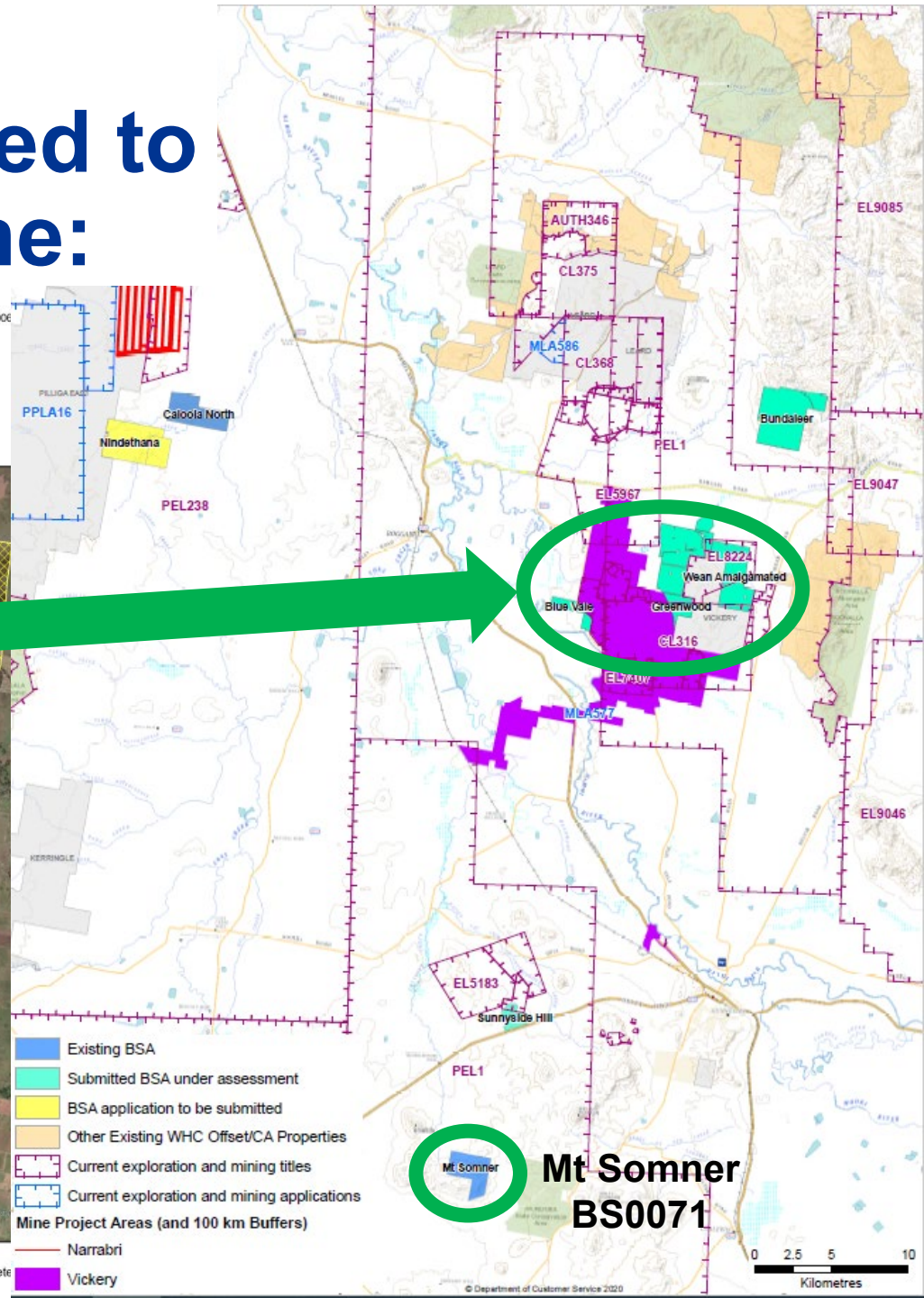


Map 1: Surrounding the Vickery Mine



### Legend

- Vickery EPL Boundary
- Willeroi East - Conservation Agreement already secured (Willeroi CA006)
- BSA Biodiversity Stewardship Agreement (to be applied for)
- Conservation Agreements (to be applied for)
- Vickery Mine NSW Approval Area
- VEP\_BARBOS\_footprint
- Namoi River Hydroline (NSW Topographic Map)
- NP and Forestry Estate
- Other WHC Biodiversity Offset/Conservation Areas



### Properties

#### BSA PROPERTIES

1. Blue Vale - 160.44ha
2. Greenwood - 218.82ha
3. Wean Amalgamated - 1943.24ha
  - 3a Bull Mountain (whole)
  - 3b Woodlands (whole)
  - 3c Wear/Silkdale (whole)
  - 3d Gundawarra (part)
  - 3e Wean (part)
  - 3f Yarrowonga (whole)

#### CA PROPERTIES

4. Costavale - 259.45ha
5. Glenroc - 73.3ha
6. Wean North - 187.81ha

Map Printed 8th December 2022

- Existing BSA
- Submitted BSA under assessment
- BSA application to be submitted
- Other Existing WHC Offset/CA Properties
- Current exploration and mining titles
- Current exploration and mining applications
- Mine Project Areas (and 100 km Buffers)
  - Narrabri
  - Vickery

**Mt Somner**  
**BS0071**



# FINAL Retirement of Vickery Credit Liability

Compliance with SSD-7480 Conditions B58 & B59 Credit Retirement has been met:

BVT Ecosystem Credits	BBAM Credits SSD 7480 12 Aug 2020	PCT Ecosystem Credits	DPE Conversion BAM Credits 7 Oct 2022		Yarrari & Belah BA 43 Credits Retirement #1	Mt Somner BS0071 Credits Retirement #2	Wean Amalgamated BS0145 Credits Retirement #3	Greenwood BS0143 Credits Retirement #4	Blue Vale BS0144 Credits Retirement #5	CST Credit Transfer & Retirement #6	BCF Payment Retirement #7	TOTAL BIODIVERSITY CREDITS RETIRED	% BIODIVERSITY CREDITS RETIRED
NA185	3,540	PCT 101 HBT	850				1,601+432					850	100%
		PCT101 Non	1,183									1,183	100%
NA324	6,955	PCT 397 HBT	610				178+1,380			548		610	100%
		PCT 397 Non	1,974				243	125		110		1,974	100%
NA349	1,795	PCT 594 HBT	651			798						651	100%
		PCT 594 Non	252			105						252	100%
NA311	4,025	PCT 459 HBT	593		370*		1,137					593	100%
		PCT 459 Non	914									914	100%
NA201	46	PCT 53 Non	22						4		18	22	100%
NA193	40	PCT 78 HBT	20						2		18	20	100%
TOTAL	16,401	TOTAL	7,069		370*	903	4,971	125	6	658	36	7,069	100%

HBT = Hollow Bearing Tree type Ecosystem Credits; Non = Not HBT type Ecosystem Credits; \* Is 869 Biobanking Credits retired in BA43 that when BBAM Credits are converted to BAM Credits are equivalent to 370 Ecosystem Credits


BVT Species Credits	BBAM Credits SSD 7480 12 Aug 2020	DPE Conversion BAM Credits 7 Oct 2022		Yarrari & Belah BA 43 Credits Retirement #1	Mt Somner BS0071 Credits Retirement #2	Wean Amalgamated BS0145 Credits Retirement #3	Greenwood BS0143 Credits Retirement #4	Blue Vale BS0144 Credits Retirement #5	CST Credit Transfer & Retirement #6	BCF Payment Retirement #7	TOTAL BIODIVERSITY CREDITS RETIRED	% BIODIVERSITY CREDITS RETIRED
Regent Honeyeater (Anthochaera phrygia)	3,703	0									0	Not Required
Squirrel Glider (Petaurus norfolcensis)	1,672	1,672				1,241		431			1,672	100%
Koala (Phascolarctos cinereus)	1,308	1,308			1,308						1,308	100%
TOTAL	6,683	2,980		0	1,308	1,241	0	431	0	0	2,980	100%



# Retirement #1 from Yarrari & Belah BA43

## Biodiversity Credits Retired (Attachment 4):

- 869 NA228 Biobanking Biodiversity Credits from Whitehaven Coal Mining Limited owned BA43 Yarrari & Belah Biobanking Agreement were retired on 8 December 2022 as like for like with PCT 459 (previously NA311) resulting in a converted total of 370 BAM Ecosystem Credits HBT (as per statement of reasonable equivalence) being retired against the Vickery Coal Mine credit liability.



**Credit retirement report**

Effective date: 08-December-2022  
Transaction number: 202212-RT-804  
Credit owners' details  
Credit owner ID: 47  
Name of credit holder: Whitehaven Coal Limited  
Other owner(s):  
No other owners  
Reason for retirement: To comply with a State significant development or State significant infrastructure project approval

Ecosystem credit(s) retired								
Number of credits	Credit profile ID	Agreement ID	Vegetation code	Vegetation type	CMA subregion	% surrounding vegetation	Patch size	Vegetation formation(see key)
869	304	43	NA228	NA228/White Cypress Pine - Narrow-leaved Ironbark shrub/grass open forest of the western Nandewar Bioregion	Peel - Namoi	>70%	>100 ha	DSS

# Retirement #2 from Mt Somner BS0071

## Biodiversity Credits Retired (Attachment 5):

- 798 PCT588 HBT and 105 PCT588 Non-HBT Ecosystem Credits from Coalworks Limited owned BS0071 Mt Somner BSA were retired on 3 April 2024 as like for like with PCT594 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;
- 1308 Koala Species Credits from Coalworks Limited owned BS0071 Mt Somner BSA were retired on 3 April 2024 as like for like with Koala Species Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability.

### Credit retirement report

Approved Date 3/04/2024  
Transaction number CT-3082, CT-3083, CT-3087  
Case Number 00047183

#### Credit holder details

Credit holder (s)	ID	Name
	C-015959	Coalworks Limited

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah and Narrabri

Date of obligation to retire 15/09/2021



### Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0071	00036884	CH-320	CR-33622	798	White Box - White Cypress Pine shrubby hills open forest mainly in the Nandewar Bioregion	588	North-west Slopes Dry Sclerophyll Woodlands >=50% and <70%	North-west Slopes Dry Sclerophyll Woodlands	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	Yes
BS0071	00036884	CH-320	CR-33623	105	White Box - White Cypress Pine shrubby hills open forest mainly in the Nandewar Bioregion	588	North-west Slopes Dry Sclerophyll Woodlands >=50% and <70%	North-west Slopes Dry Sclerophyll Woodlands	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	

### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name
BS0071	00036884	CH-320	CR-33624	1308	10616	Phascolarctos cinereus	Koala

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

This information is only current as of the date of provision and may not reflect subsequent legislative, policy or procedural changes.

Environment and Heritage Group, Department of Planning and Environment, Locked Bag 5022, Parramatta NSW 2124. Phone: 1300 361 967 (environment and national parks enquiries); email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au); website: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)



# Retirement #3 from Wean Amalgamated

## BS0145 Biodiversity Credits Retired (Attachment 6):

- 1137 PCT592 HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0145 Wean Amalgamated BSA were retired on 3 April 2024 as like for like with PCT459 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;
- 178 PCT88 HBT and 243 PCT88 Non-HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0145 Wean Amalgamated BSA were retired on 3 April 2024 as like for like with PCT397 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;
- 1380 PCT397 HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0145 Wean Amalgamated BSA were retired on 3 April 2024 as like for like with PCT397 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;

### Credit retirement report

Approved Date 3/04/2024

Transaction number CT-3095, CT-3096, CT-3097, CT-3099, CT-3102, CT-3104, CT-3106

Case Number 00047188

#### Credit holder details

Credit holder (s)	ID	Name
	C-014824	WHITEHAVEN COAL MINING LTD

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to retire 12/08/2020



### Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0145	00046277	CH-512	CR-33615	1137	Narrow-leaved Ironbark - cypress pine - White Box shrubby open forest in the Brigalow Belt South Bioregion and Nandewar Bioregion	592	Western Slopes Dry Sclerophyll Forests >=50% and <70%	Western Slopes Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrubby sub-formation)	Liverpool Plains	Yes
BS0145	00046277	CH-512	CR-33616	178	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	Yes
					Brigalow Belt South Bioregion						
BS0145	00046277	CH-512	CR-33617	243	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the Brigalow Belt South Bioregion	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	
BS0145	00046277	CH-512	CR-33618	1380	Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warialda region, Brigalow Belt South Bioregion	397	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	Yes

# Retirement #3 from Wean Amalgamated

## BS0145 Biodiversity Credits Retired (Attachment 6):

- 1601 PCT101 HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0145 Wean Amalgamated BSA were retired on 3 April 2024 as like for like with PCT101 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;
- 432 PCT101 HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0145 Wean Amalgamated BSA were retired on 3 April 2024 as like for like with PCT101 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;
- 1241 Squirrel Glider Species Credits from Whitehaven Coal Mining Limited owned BS0145 Wean Amalgamated BSA retired on 3 April 2024 as like for like with Squirrel Glider Species Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability.

### Credit retirement report

Approved Date 3/04/2024  
Transaction number CT-3095, CT-3096, CT-3097, CT-3099, CT-3102, CT-3104, CT-3106  
Case Number 00047188

#### Credit holder details

Credit holder (s)	ID	Name
	C-014824	WHITEHAVEN COAL MINING LTD

Reason for Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to 12/08/2020

BS0145	00046277	CH-512		1601		101					Yes
			CR-33619		Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking clay soils mainly in the Liverpool Plains, Brigalow Belt South Bioregion		Brigalow Clay Plain Woodlands >=70% and <90%	Brigalow Clay Plain Woodlands	Semi-arid Woodlands (Grassy sub-formation)	Liverpool Plains	
BS0145	00046277	CH-512	CR-33620	432	Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking	101	Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain,	Brigalow Clay Plain Woodlands	Semi-arid Woodlands (Grassy sub-formation)	Liverpool Plains	Yes (including artificial)
					Plains, Brigalow Belt South Bioregion		Belt South Bioregions				

### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name
BS0145	00046277	CH-512	CR-33621	1241	10604	Petaurus norfolcensis	Squirrel Glider

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

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# Retirement #4 from Greenwood BS0143

## Biodiversity Credits Retired (Attachment 7):

- 125 PCT397 Non-HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0143 Greenwood BSA were retired on 8 April 2024 as like for like with PCT397 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability.

Credit retirement report

Approved Date

8/04/2024

Transaction number

CT-5187

Case Number

00047309

Credit holder details

Credit holder (s)

ID

C-014824

Name

WHITEHAVEN COAL MINING LTD

Reason For Retiring

For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number

SSD 7480 and EPBC 2016/7649

Address of Obligation

Blue Vale Road, Gunnedah NSW 2380

Local government area

Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to retire

12/08/2020

Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0143	00045779	CH-503	CR-33675	125	Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warrallda region, Brigalow Belt South Bioregion	397	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	

# Retirement #5 from Blue Vale BS0144

## Biodiversity Credits Retired (Attachment 8):

- 4 PCT53 Non-HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0144 Blue Vale BSA were retired on 8 April 2024 as like for like with PCT53 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;
- 2 PCT78 HBT Ecosystem Credits from Whitehaven Coal Mining Limited owned BS0144 Blue Vale BSA were retired on 8 April 2024 as like for like with PCT78 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability;
- 431 Squirrel Glider Species Credits from Whitehaven Coal Mining Limited owned BS0144 Blue Vale BSA were retired on 8 April 2024 as like for like with Squirrel Glider Species Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability.

### Credit retirement report

Approved Date 8/04/2024  
Transaction number CT-3150, CT-3153, CT-3155  
Case Number 00047306

### Credit holder details

ID	Name
C-014824	WHITEHAVEN COAL MINING LTD

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to 12/08/2020

### Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0144	00046220	CH-509	CR-33672	4	Shallow freshwater wetland sedgeland in depressions on floodplains on inland alluvial plains and floodplains	53	Inland Floodplain Swamps >=50% and <70%	Inland Floodplain Swamps	Freshwater Wetlands	Liverpool Plains	
BS0144	00046220	CH-509	CR-33673	2	River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion	78	Inland Riverine Forests >=50% and <70%	Inland Riverine Forests	Forested Wetlands	Liverpool Plains	Yes

### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name
BS0144	00046220	CH-509	CR-33674	431	10604	Petaurus norfolcensis	Squirrel Glider

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

This information is only current as of the date of provision and may not reflect subsequent legislative, policy or procedural changes.

Environment and Heritage Group, Department of Planning and Environment, Locked Bag 5022, Parramatta NSW 2124. Phone: 1300 361 967 (environment and national parks enquiries); email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au); website: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)





# Retirement #6 from CST Transfer

## Biodiversity Credits Retired (Attachment 9):

- 548 PCT88 HBT and 110 PCT88 Non-HBT Ecosystem Credits purchased from NSW Credit Supply Fund (CST) by Whitehaven Coal Mining Limited were retired on 18 April 2024 as like for like with PCT397 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability.

### Credit retirement report

Approved Date 18/04/2024

Transaction number CT-3288, CT-3289

Case Number 00047542

#### Credit holder details

ID	Name
C-014824	WHITEHAVEN COAL MINING LTD

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to retire 12/08/2020



### Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0152	00046748	CH-556	CR-33977	548	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the Brigalow Belt South Bioregion	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Pilliga Outwash	Yes
BS0152	00046748	CH-556	CR-33978	110	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the Brigalow Belt	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Pilliga Outwash	

# Retirement #7 from BCF Payment

## Biodiversity Credits Retired (Attachment 10):

- 18 PCT78 HBT and 18 PCT53 Non-HBT Ecosystem Credits were paid into Biodiversity Conservation Fund (BCF) by Vickery Coal Pty Limited were retired on 16 April 2024 for the PCT53 and PCT78 Ecosystem Credits (reasonable equivalence converted) against the Vickery Coal Mine credit liability.

## Statement confirming payment into the Biodiversity Conservation Fund for an offset obligation

Pursuant to section 6.33 of the *Biodiversity Conservation Act 2016*, the NSW Biodiversity Conservation Trust confirms that the following payments have been made into the Biodiversity Conservation Fund under section 6.30(1) of the Act to satisfy an obligation to retire biodiversity credits.

Payment made by		Vickery Coal Pty Ltd			
Date received		11 April 2024			
NSW statutory obligation reference <sup>1</sup>		SSD-7480			
Commonwealth EPBC Act controlled action reference (if applicable) <sup>2</sup>		Yes			
BCT Reference		BCF701			
Biodiversity credit retirement obligations satisfied by payment to the Biodiversity Conservation Fund:					
Biodiversity credit type (Credit ID and name)	Offset trading group	EPBC Act Controlled Action offset obligation (Y / N)	Number of credits	Cost per credit  (Exc. GST)	Total payment per credit type  (Exc. GST)
53 - Shallow freshwater wetland sedgeland in depressions on floodplains on inland alluvial plains and floodplains	Inland Floodplain Swamps >=50% and <70%	Y	18	\$7,783.64	\$140,105.52
78 - River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion	Inland Riverine Forests >=50% and <70%	Y	18	\$4,394.06	\$79,093.08
Total (Exc. GST)					\$219,198.60
GST					\$21,919.86
Total (Inc. GST)					\$241,118.46



Emily McCosker 16/04/2024

Director Strategy & Finance

<sup>1</sup> This refers to either; a development application number for a development consent under Part 4 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*, a State significant infrastructure approval under the previous Part 5.1 (now Part 5, Division 5.2) of the EP&A Act, a decision of a determining authority to carry out or approve the carrying out of an activity under Part 5 of the EP&A Act, or a biobank statement number or biodiversity certification number.

<sup>2</sup> This refers to a controlled action under the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* for which a biodiversity offset obligation has been met through payment into the BCF.



# FINAL Retirement of Credits Status Report Summary:

- Vickery Coal Mine (VCM) Original & Substituted Offset Areas:
  - Landscape Concept and Approach
  - Approved RBOS & Substituted Offset

## Biodiversity Offset Strategy – transferred obligations from Vickery Coal Project as modified by the Vickery Extension Project

B56. The Applicant shall implement the biodiversity offset strategy described in the EIS, summarised in Table 9 and shown conceptually in Appendix 4, to the satisfaction of the Planning Secretary.

**Table 9:** Summary of the biodiversity offset strategy – Vickery Coal Project

Area	Offset Type	Minimum Size (hectares)
Willeroi East Offset Area	Existing vegetation to be enhanced, and additional vegetation to be established with the restoration of at least 156 ha of Box Gum Woodland EEC, as listed under the BC Act	1,671
Areas 2, 3, 4 & 5	Existing vegetation to be enhanced with the restoration of at least 127 ha of Poplar Box Woodland and 45 ha of Box Gum Woodland EEC, as listed under the BC Act	404.5
Rehabilitation Area	Re-establishment of native vegetation communities for a biodiversity conservation land use objective.	1,360

### Notes:

- For the purposes of this consent Box Gum Woodland refers to the EEC listed as White Box Yellow Box Blakely's Red Gum Woodland under the TSC Act, or similar EEC as may be updated from time to time.
- Any area of the offset strategy in Table 9 may be substituted with an alternative offset area subject to demonstration of equivalent biodiversity outcomes and to the satisfaction of the Secretary



# Original & Substituted Offset Areas

## Landscape Concept and Approach for identifying Substituted Vickery Offsets

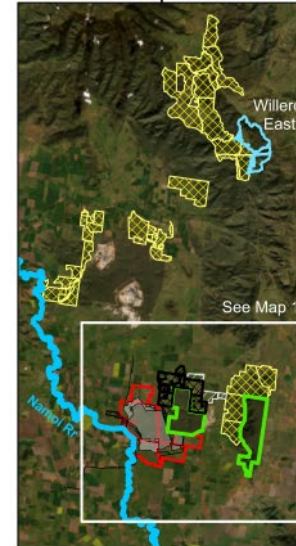
As noted above, WHC has established the Wean Amalgamated Biodiversity Stewardship Agreement (BSA – 3 in Figure) which adjoins the northern part of the Vickery State Forest (VSF).

The Vickery Substituted Offsets selected (4. Costavale; 5. Glenroc & 6. Wean North) would recreate a vegetated link between the VSF to the Boonalla Aboriginal Area (NPWS) and WHCs other existing Offset Areas (secured by Biobanking & Conservation Agreements) with the Wean Amalgamated BSA to develop a Biodiversity Corridor overtime.

Landscape corridor would be located just north of the former Rocglen Coal Mine.

### VICKERY BOS APPROACH

Overview Map



0 5 10 20 Kilometers

#### Properties

- BSA PROPERTIES
- 1. Blue Vale - 160.4ha
  - 2. Greenwood - 218.8ha
  - 3. Wean Amalgamated - 1938.8ha
    - 3a Bull Mountain
    - 3b Woodlands
    - 3c Wear/Silkdale
    - 3d Gundawarra (part)
    - 3e Wean
    - 3f Yarrowonga

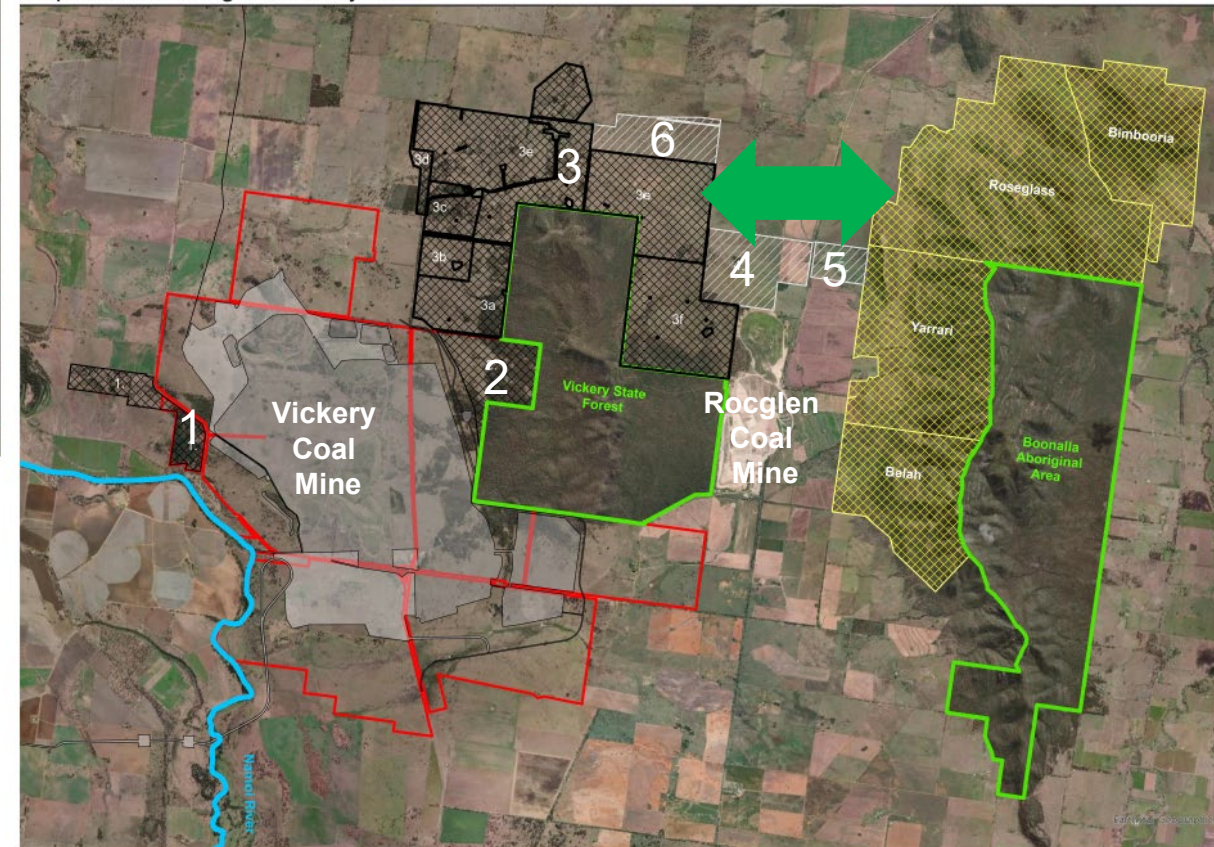
- CA PROPERTIES
- 4. Costavale - 259.5ha
  - 5. Glenroc - 73.3ha
  - 6. Wean North - 187.8ha

Map Printed 22nd September 2023

#### Legend

- Vickery EPL Boundary
- Willeroi East - Conservation Agreement already secured (Willeroi CA0060)
- Conservation Agreements (to be applied for)
- Vickery Mine NSW Approval Area
- VEP\_BARBOS\_footprint
- Namoi River Hydroline (NSW Topographic Map)
- NP and Forestry Estate
- Other WHC Biodiversity Offset/Conservation Areas
- 230922\_Wean Amalgamated Property\_GDA94MGA56\_230922

Map 1: Surrounding the Vickery Mine



0 1.5 3 6 Kilometers



# Original & Substituted Offset Areas

## Approved RBOS and Substituted replacing Original Offset Areas (Attachment 11)

Vickery Revised Biodiversity Offset Strategy outlining how Willeroi East and proposed Vickery Substituted (properties replacing previous 2-5) Offsets Areas address the requirements of SSD-7480 was submitted on 11 September 2023 to NSW Department of Planning, Housing & Infrastructure (DPHI) for Secretary satisfaction in accordance with SSD-7480 Condition B56.

NSW Department of Climate Change, Energy, the Environment and Water was consulted and satisfied on 8 March 2024. Then NSW DPHI approved the Vickery RBOS on 13 March 2024.

Revised Vickery Biodiversity Offset Strategy Report

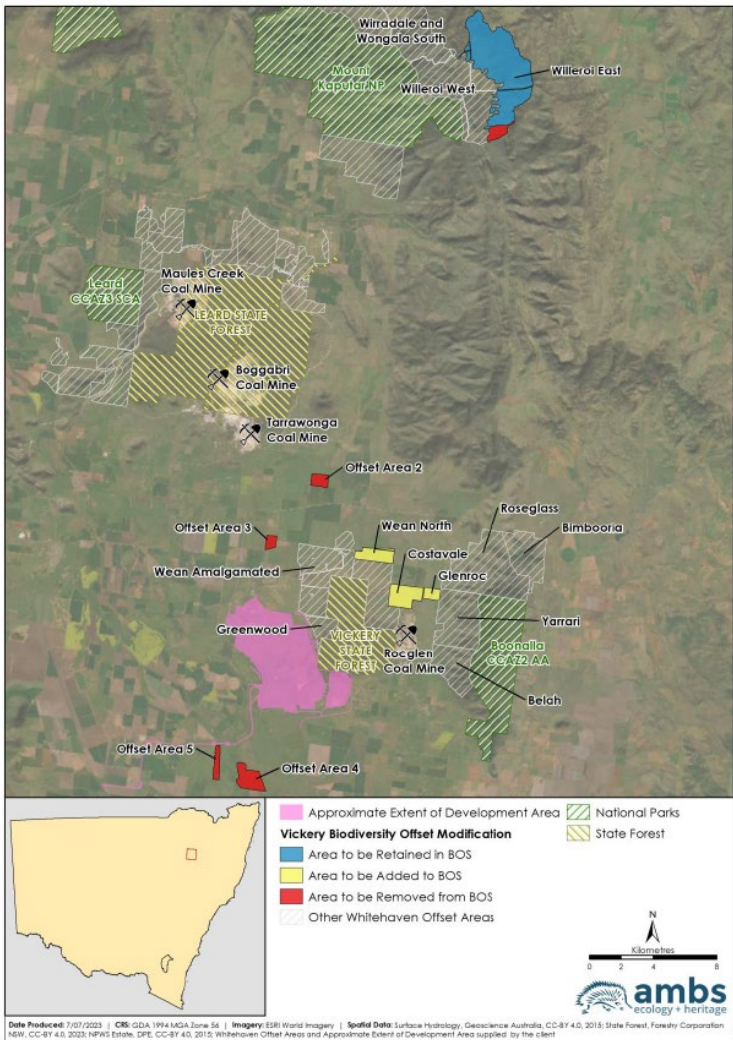


Figure 1.1 Location of the study area



### Revision of the Vickery Biodiversity Offset Strategy

Prepared by AMBS Ecology & Heritage Pty Ltd  
for Whitehaven Coal Limited

Submission Report

March 2024

Department of Planning, Housing & Infrastructure



Tony Dwyer  
Group Manager – Approvals and Biodiversity  
Vickery Coal Pty Ltd  
By email: [tdwyer@whitehavencol.com.au](mailto:tdwyer@whitehavencol.com.au)  
13/03/2024

Subject: Revised Biodiversity Offset Strategy

Dear Mr Dwyer

Thank you for submitting the Revised Biodiversity Offset Strategy in accordance with condition B56 of the development consent for the Vickery Coal Mine Extension Project (SSD 7480). I also acknowledge your response to the Department's requests for additional information.

In the strategy has been prepared in consultation with the Biodiversity Conservation and Science Directorate of the NSW Department of Climate Change, Energy, the Environment and Water, and contains the information required by the conditions of consent. Accordingly, as nominee of the Planning Secretary, I approve the Revised Biodiversity Offset Strategy (Rev 5, dated 12 March 2024).

You are reminded that the Biodiversity Management Plan, required by condition B63 of SSD 7480 must be reviewed and revised to include any relevant changes. Please ensure that all relevant management plans and strategies are reviewed and updated to reflect the changes in the strategy.

You are reminded that if there are any inconsistencies between the strategy and the conditions of approval, the conditions prevail. Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Philip Nevill on (02) 8275 1036.

Yours sincerely

Stephen O'Donoghue  
Director  
Resource Assessments  
As nominee of the Planning Secretary

4 Parramatta Square, 12 Cherry Street, Parramatta NSW 2150  
Locked Bag 9022, Parramatta NSW 2124

Department of Climate Change, Energy, the Environment and Water



Our ref: DDC/16840  
Your ref: SSD 7480

Philip Nevill  
Senior Environmental Assessment Officer  
Energy and Resource Assessment  
Department of Planning, Housing & Infrastructure  
[philip.nevill@planning.nsw.gov.au](mailto:philip.nevill@planning.nsw.gov.au)

Dear Philip,  
Vickery Coal 2 – Revised biodiversity offset strategy (SSD 7480)

Thank you for your e-mails dated 23 and 27 February, and request via the Major Project Portal on 7 March 2024, to the Biodiversity, Conservation and Science Directorate (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCEEW) providing additional information on the progress of biodiversity credit retirement and an updated version of the revised biodiversity offset strategy (BOS) for Vickery Coal 2.

We appreciate the inclusion of additional information in the BOS to address the recommendations in our letter dated 2 February 2024. As recommended, the BOS now includes additional information for:

- the criteria used to select the substitute offset sites,
- justification for replacing offset Areas 2 to 5,
- land management history for the original and the substitute offset sites,
- data enabling a comparison of current vegetation condition and species habitat between the original and substitute offset sites,
- details of the restoration program for the substitute offset sites.

We are of the view that the substitute offset sites as described in the revised BOS are capable of meeting the condition under Condition B56 of the project consent. Evidence that long term security of the offset sites has been established should be provided prior to discharging the requirements of this condition.

Specific comments on the revised information in the BOS is provided below.

Advantages of the substitute offset sites

The Vickery substitute offsets will be consolidated with other Whitehaven offset areas. We concur with the revised BOS findings that, with management for restoration and conservation, the substitute offset areas will:

- Provide landscape connectivity between Boonalla Community Conservation Area and Vickery State Forest
- Experience lower edge effects than the original offset areas 2 to 5
- Be less vulnerable to stochastic events than offset areas 2 to 5
- Be more efficient to manage for conservation, especially when combined with the other Whitehaven offset areas.

Figure 3.1 Location of substituted offset areas adjoining other WHC Biodiversity Management Areas (existing Offset Areas/Conservation Agreements and Biodiversity Stewardship Sites)



# Attachment 1

**SSD-7480**

**Approved 12  
August 2020**



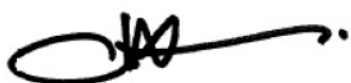
# Development Consent

## ***Section 4.36 of the Environmental Planning and Assessment Act 1979***

The Independent Planning Commission of NSW (the Commission), as the declared consent authority under clause 8A of the *State Environmental Planning Policy (State and Regional Development) 2011* and section 4.5(a) of the *Environmental Planning and Assessment Act 1979*, approves the development application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.



John Hann (Chair)  
Member of the Commission



Professor Zada Lipman  
Member of the Commission



Professor Chris Fell AM  
Member of the Commission

Sydney

12 August 2020

### **SCHEDULE 1**

<b>Application Number:</b>	SSD 7480
<b>Applicant:</b>	Vickery Coal Pty Ltd
<b>Consent Authority:</b>	Independent Planning Commission of NSW
<b>Site:</b>	The land defined in Appendix 1
<b>Development:</b>	Vickery Extension Project

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## DEFINITIONS

<b>Aboriginal object</b>	Has the same meaning as the definition of the term in section 5 of the NP&W Act
<b>Aboriginal place</b>	Has the same meaning as the definition of the term in section 5 of the NP&W Act
<b>Annual Review</b>	The review required by condition E9
<b>Applicant</b>	Vickery Coal Pty Ltd, or any person carrying out any development under this consent
<b>Approved disturbance area</b>	The indicative surface disturbance areas identified on the Development Layout
<b>Approved haulage route</b>	The route used to transport coal and reject between the development, the Tarrawonga Coal Project and the Whitehaven CHPP, which includes the use of public roads, including Blue Vale Road and the Kamilaroi Highway (refer Figure 3 in Appendix 2)
<b>ARI</b>	Average Recurrence Interval
<b>ARTC</b>	Australian Rail Track Corporation
<b>BCA</b>	Building Code of Australia
<b>BC Act</b>	<i>Biodiversity Conservation Act 2016</i>
<b>BCD</b>	Biodiversity & Conservation Division within the Department
<b>BCT</b>	NSW Biodiversity Conservation Trust
<b>Blast misfire</b>	The failure of one or more holes in a blast pattern to initiate
<b>Calendar year</b>	A period of 12 months from 1 January to 31 December
<b>CCC</b>	Community consultative committee required by condition A23
<b>CHPP</b>	Coal handling and preparation plant
<b>Conditions of this consent</b>	Conditions contained in Schedule 2
<b>Construction</b>	All physical works required to enable mining operations to be carried out, including demolition and removal of buildings or works, and erection of buildings and other infrastructure permitted by this consent, but not including pre-construction activities
<b>Date of commencement</b>	The date notified to the Department by the Applicant under condition A5(a)
<b>Day</b>	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays
<b>Decommissioning</b>	The deconstruction or demolition and removal of works and buildings installed as part of the development
<b>Demolition</b>	The deconstruction and removal of buildings, sheds and other structures on the site
<b>Department</b>	NSW Department of Planning, Industry and Environment
<b>Development</b>	The development described in the document/s listed in condition A2(c), as modified by the conditions of this consent
<b>Development Layout</b>	The indicative development layout depicted in Figure 2 in Appendix 2
<b>DPI NSW Fisheries</b>	NSW Fisheries Group within the NSW Department of Primary Industries
<b>DPIE Crown Lands</b>	Crown Lands Group within the Department
<b>DPIE Water</b>	Water Group within the Department
<b>Ecological Rehabilitation</b>	Rehabilitation of the approved disturbance area to satisfy biodiversity credit requirements
<b>EIS</b>	The Environmental Impact Statement titled <i>Vickery Extension Project - Environmental Impact Statement</i> , prepared by Resource Strategies Pty Ltd on behalf of Vickery Coal Pty Ltd, dated September 2018, submitted with the application for consent for the development; the Applicant's report titled <i>Vickery Extension Project - Submissions Report</i> dated August 2019; the Applicant's report titled <i>Vickery Extension Project Amendment Report</i> dated September 2019 and the Applicant's additional information responses in support of the application dated 9 August 2019, 17 September 2019, 2 October 2019, 18 October 2019, 31 October 2019, 1 November 2019, 6

November 2019, 12 November 2019, 14 November 2019, 28 November 2019, 17 January 2020, 17 February 2020, 3 March 2020, 9 March 2020, 13 March 2020 and 16 March 2020

<b>Environment</b>	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
<b>EPA</b>	NSW Environment Protection Authority
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EP&amp;A Regulation</b>	<i>Environmental Planning and Assessment Regulation 2000</i>
<b>EPBC Act</b>	<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>
<b>EPL</b>	Environment Protection Licence under the POEO Act
<b>Evening</b>	The period from 6 pm to 10 pm
<b>Feasible</b>	Means what is possible and practical in the circumstances
<b>Financial year</b>	A period of 12 months from 1 July to 30 June
<b>GSC</b>	Gunnedah Shire Council
<b>Heritage NSW</b>	Heritage NSW in the Department of Premier and Cabinet
<b>Heritage item</b>	<p>An Aboriginal object, an Aboriginal place, or a place, building, work, relic, moveable object, tree or precinct of heritage significance, that is listed under any of the following:</p> <ul style="list-style-type: none"> <li>• the State Heritage Register under the <i>Heritage Act 1977</i>;</li> <li>• a state agency heritage and conservation register under section 170 of the <i>Heritage Act 1977</i>;</li> <li>• a Local Environmental Plan under the EP&amp;A Act;</li> <li>• the World Heritage List;</li> <li>• the National Heritage List or Commonwealth Heritage List under the EPBC Act; or</li> <li>• anything identified as a heritage item under the conditions of this consent</li> </ul>
<b>ICNG</b>	<i>Interim Construction Noise Guideline</i>
<b>Incident</b>	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
<b>Land</b>	Has the same meaning as the definition of the term in section 1.4 of the EP&A Act, except for where the term is used in the noise and air quality conditions in PART B of this consent where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
<b>LLS</b>	Local Land Services
<b>Material harm</b>	<p>Is harm to the environment that:</p> <ul style="list-style-type: none"> <li>• involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or</li> <li>• results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li> </ul> <p>This definition excludes “harm” that is authorised under either this consent or any other statutory approval</p>
<b>MEG</b>	Regional NSW – Mining, Exploration and Geoscience
<b>Mine-owned land</b>	Land owned by a mining, petroleum or extractive industry company (or its subsidiary or related party)
<b>Mine closure</b>	Decommissioning and final rehabilitation of the site following the cessation of mining operations
<b>Mine water</b>	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where runoff or groundwater inflow may have come into contact with carbonaceous material (other than vegetation)
<b>Minimise</b>	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
<b>Mining operations</b>	The carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden and reject material
<b>Minister</b>	NSW Minister for Planning and Public Spaces, or delegate



<b>Minor</b>	Not very large, important or serious
<b>Mitigation</b>	Activities associated with reducing the impacts of the development
<b>MOP</b>	Mining operations plan, or similar, required by a mining lease under the <i>Mining Act 1992</i>
<b>Negligible</b>	Small and unimportant, such as to be not worth considering
<b>Night</b>	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays
<b>Noise sensitive areas</b>	Areas where mining operations are being carried out that have potential to lead to increased noise at privately-owned residences, such as elevated areas or areas near the boundary of the site
<b>Non-compliance</b>	An occurrence, set of circumstances or development that is a breach of this consent
<b>'Non-road' mobile diesel equipment</b>	Mobile equipment used in mining operations that is fitted with a diesel engine with a capacity >30 litres and that is self-propelled or transportable and primarily designed for off-road use
<b>NP&amp;W Act</b>	<i>National Parks and Wildlife Act 1974</i>
<b>NSC</b>	Narrabri Shire Council
<b>Open woodland</b>	Medium density native woodland with a significant grassy understorey
<b>PA</b>	Planning agreement within the meaning of the term in section 7.4 of the EP&A Act
<b>Planning Secretary</b>	Planning Secretary under the EP&A Act, or nominee
<b>POEO Act</b>	<i>Protection of the Environment Operations Act 1997</i>
<b>Pre-Construction works</b>	Pre-construction works that may be required for the development, including surveys, acquisitions, fencing, investigative or geotechnical drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations)
<b>Privately-owned land</b>	Land that is not owned by a public agency or a mining, petroleum or extractive industry company (or its subsidiary or related party)
<b>Project Rail Spur</b>	The private rail spur associated with the development
<b>Public infrastructure</b>	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.
<b>Reasonable</b>	Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
<b>Registered Aboriginal Parties</b>	As described in the <i>National Parks and Wildlife Regulation 2019</i>
<b>Rehabilitation</b>	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting over the short, medium and long term
<b>Residence</b>	Existing or approved dwelling at the date of grant of this consent
<b>Resources Regulator</b>	NSW Resources Regulator within the Department
<b>RFS</b>	NSW Rural Fire Service
<b>ROM</b>	Run-of-mine
<b>Site</b>	The land defined in Appendix 1
<b>Tarrawonga Coal Project</b>	The Tarrawonga Coal Project approved by the Project Approval (MP 11_0047) granted under the EP&A Act by the NSW Planning Assessment Commission on 22 January 2013, as subsequently modified
<b>TfNSW</b>	Transport for NSW (incorporating the former NSW Roads and Maritime Services)
<b>Vickery Coal Project</b>	The Vickery Coal Project approved by the development consent (SSD 5000) granted under the EP&A Act by a delegate of the Minister for Planning on 19 September 2014
<b>Whitehaven CHPP</b>	The Whitehaven Coal Handling and Preparation Plant approved by the development consent granted under the EP&A Act by the GSC on 2 October 2002 (DA 79_2002), as subsequently modified

## SCHEDULE 2

### PART A ADMINISTRATIVE CONDITIONS

#### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- A1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

#### TERMS OF CONSENT

- A2. The development may only be carried out:
- (a) in compliance with the conditions of this consent;
  - (b) in accordance with all written directions of the Planning Secretary;
  - (c) generally in accordance with the EIS; and
  - (d) generally in accordance with the Development Layout.
- A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
- (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and
  - (b) the implementation of any actions or measures contained in any such document referred to in paragraph (a).
- A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and the document/s listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

#### NOTIFICATION OF COMMENCEMENT

- A5. The Applicant must notify the Department in writing at least two weeks prior to:
- (a) commencing development under this consent;
  - (b) commencing construction under this consent;
  - (c) commencing mining operations under this consent;
  - (d) ceasing mining operations (i.e. leading to mine closure); and
  - (e) suspending mining operations (i.e. temporary care and maintenance).
- A6. If the development is to be further staged, the Department must be notified in writing at least two weeks prior to the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

#### LIMITS OF CONSENT

##### Mining operations

- A7. Mining operations may be carried out on the site, within the approved disturbance area, for a period of 25 years from the date of this consent.

##### Notes:

- Under this consent, the Applicant is required to decommission and rehabilitate the site and carry out other requirements in relation to mining operations. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of mining operations until the rehabilitation of the site and other requirements have been carried out to the required standard.
- Mining operations and rehabilitation are also regulated under the Mining Act 1992.

##### Coal Extraction and Processing

- A8. A maximum of 10 million tonnes of ROM coal may be extracted from the site in any financial year.
- A9. A maximum of 3.5 million tonnes of ROM coal extracted from other mining operations may be received at the site in any financial year.
- A10. A maximum of 13 million tonnes of ROM coal may be processed on the site in any financial year.

##### Coal Transport – Rail

- A11. A maximum of 11.5 million tonnes of product coal may be transported from the site by rail in any financial year.

##### Coal Transport – Road

- A12. For the period up until the commissioning of the Kamilaroi Highway overpass, the Applicant:
- (a) may not transport more than 3.5 million tonnes of ROM coal from the site by road in any financial year;



- (b) may transport up to 150,000 tonnes of this ROM coal from the site in any financial year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway;
  - (c) shall transport all other coal from the site to the Whitehaven CHPP via the approved haulage route; and
  - (d) shall, together with the proponent of the Tarrawonga Coal Project, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 3.5 million tonnes in any financial year.
- A13. For the period following the commissioning of the Kamilaroi Highway overpass and until the commissioning of the Project Rail Spur, the Applicant:
- (a) may not transport more than 4.5 million tonnes of ROM coal from the site by road in any financial year;
  - (b) may transport up to 150,000 tonnes of this ROM coal from the site in any financial year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway;
  - (c) shall transport all other coal from the site to the Whitehaven CHPP via Blue Vale Road and the Kamilaroi Highway overpass; and
  - (d) shall, together with the proponent of the Tarrawonga Coal Project, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 4.5 million tonnes in any financial year.
- A14. Following the commissioning of the CHPP, rail load-out facility and Project Rail Spur, the Applicant must only transport coal from the site by rail except for up to 150,000 tonnes of ROM coal which may be transported from the site by road in any financial year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway.
- A15. The Applicant shall only transport coal from the site by road, receive coal from other mining operations or receive coal reject from the Whitehaven CHPP by road between the hours of:
- (a) 6 am to 9.15 pm Monday to Friday;
  - (b) 7 am to 5.15 pm Saturday; and
  - (c) at no time on Sundays or Public Holidays.

#### Hours of Operation

- A16. The Applicant may undertake the development 24 hours a day, 7 days a week, except for:
- (a) transport operations as described in condition A15;
  - (b) blasting operations as described in condition B19; and
  - (c) construction hours as described in condition C1.

#### Identification of Approved Disturbance Area

- A17. Within three months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must provide to the Department a survey plan of the boundaries of the approved disturbance areas.

#### SURRENDER OF EXISTING CONSENT

- A18. Within 12 months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the following development consents are to be surrendered in accordance with the EP&A Regulation:
- (a) the development consent for the Vickery Coal Project (SSD 5000); and
  - (b) the development consent for the Canyon Coal Mine (DA 8-1-2005).

**Note:** This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under the former Part 4A of the EP&A Act or Part 6 of the EP&A Act as applies from 1 September 2018. The surrender should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.

- A19. Upon the date of commencement of development under this consent, and before the surrender of the existing development consents required under condition A18, the conditions of this consent prevail to the extent of any inconsistency.

#### PLANNING AGREEMENT

- A20. Within 6 months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must enter into a PA with GSC and NSC in accordance with:
- (a) Division 7.1 of Part 7 of the EP&A Act; and
  - (b) the terms of the Applicant's offer to GSC and NSC in Appendix 7.
- A21. If the Applicant and NSC do not enter into a PA within the timeframe under condition A20, then within a further 3 months, the Applicant must make a Section 7.12 of the EP&A Act contribution to NSC of \$3.2 Million. The amount to be paid is to be adjusted at the time of the actual payment, in accordance with the provisions of the Narrabri Shire Section 7.12 – Fixed Development Consent Levies Contributions Plan 2011.



- A22. If there is any dispute between the Applicant and the relevant Council in regards to conditions A20 and A21 then either party may refer the matter to the Planning Secretary for resolution.

#### **COMMUNITY CONSULTATIVE COMMITTEE**

- A23. The Applicant must continue operation of the Vickery Coal Project Community Consultative Committee (CCC) established under SSD 5000 for the development. The CCC must be operated in accordance with the Department's *Community Consultative Committee Guidelines: State Significant Projects* (2019) during the life of the development, or other timeframe agreed by the Planning Secretary.

**Notes:**

- *The CCC is an advisory committee only.*
- *In accordance with the Guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, GSC, NSC and the local community.*

#### **EVIDENCE OF CONSULTATION**

- A24. Where conditions of this consent require consultation with an identified party, the Applicant must:
- (a) consult with the relevant party prior to submitting the subject document for approval; and
  - (b) provide details of the consultation undertaken to the Planning Secretary, including:
    - (i) the outcome of that consultation, matters resolved and unresolved; and
    - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

#### **STAGING, COMBINING AND UPDATING STRATEGIES, PLANS OR PROGRAMS**

- A25. With the approval of the Planning Secretary, the Applicant may:
- (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);
  - (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined);
  - (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development); and
  - (d) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required by a consent or approval for any adjoining mine subject to common, shared or related ownership or management.
- A26. If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.
- A27. If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.

#### **APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS**

- A28. The Applicant must continue to apply existing management strategies, plans or monitoring programs approved under SSD 5000 for the Vickery Coal Project and DA 8-1-2005 for the Canyon Coal Mine, until the approval of a similar plan, strategy or program under this consent.

#### **PUBLIC INFRASTRUCTURE**

##### **Protection of Public Infrastructure**

- A29. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure<sup>a</sup> that is damaged by carrying out the development; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure<sup>a</sup> that needs to be relocated as a result of the development.

**Note:** <sup>a</sup> This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition A20 or to damage subject to compensation under the Mining Act 1992.

#### **DEMOLITION**

- A30. All demolition must be carried out in accordance with *Australian Standard AS 2601-2001 The Demolition of Structures* (Standards Australia, 2001), or its latest version.

## STRUCTURAL ADEQUACY

A31. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development must be constructed in accordance with the relevant requirements of the BCA.

**Notes:**

- Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

## OPERATION OF PLANT AND EQUIPMENT

A32. All plant and equipment used on site, or to monitor the performance of the development must be:

- (a) maintained in a proper and efficient condition; and
- (b) operated in a proper and efficient manner.

## COMPLIANCE

A33. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

## APPLICABILITY OF GUIDELINES

A34. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update) of the condition.

A35. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

## CROWN LAND

A36. The Applicant must consult with DPIE – Crown Lands prior to undertaking development on Crown Land or Crown Roads.

**Notes:**

- Under section 265 of the Mining Act 1992, the Applicant is required to enter into a compensation agreement with DPIE – Crown Lands prior to undertaking any mining operations or related activities on Crown land or Crown roads within a mining lease.
- Under section 141 of the Mining Act 1992, the Applicant is required to enter into an access arrangement with DPIE – Crown Lands prior to undertaking any prospecting operations on Crown land or Crown roads within an exploration licence.



## PART B SPECIFIC ENVIRONMENTAL CONDITIONS

### NOISE

#### Operational Noise Criteria

- B1. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 1 at any residence<sup>a</sup> on privately-owned land, excluding the noise-affected land referred to in Table 13.

**Table 1: Operational noise criteria dB(A)**

Residence <sup>a</sup>	Day	Evening	Night	
	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>AF max</sub>
131a	40	37	37	52
131b, 132	40	36	36	52
All other privately-owned residences	40	35	35	52

<sup>a</sup> The locations referred to in Table 1 are shown in Appendix 1.

- B2. The Applicant must ensure that noise generated by transporting coal on the Kamilaroi Highway overpass does not exceed the criteria in Table 2 at any residence on privately-owned land.

**Table 2: Kamilaroi Highway overpass noise criteria dB(A)**

Land	Day	Evening & Night	Night
	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>A1</sub> (1 min)
223	44	44	65
224	46	46	64
284	40	36	55
292	40	36	57
Any other residence within 2.5 km of the centreline of the private haul road or Kamilaroi Highway overpass	40	35	55
All other privately-owned residences	40	35	45

<sup>a</sup> The locations referred to in Table 2 are shown in Appendix 1

- B3. Noise generated by the development must be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *Noise Policy for Industry* (EPA, 2017). The noise enhancing meteorological conditions determined by monitoring at the meteorological station required under condition B38 and as defined in Part D of the *Noise Policy for Industry* (EPA, 2017) apply to the noise criteria in Table 1 and Table 2.
- B4. The noise criteria in Table 1 and Table 2 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

#### Construction Noise Criteria

- B5. Between the hours of:
- (a) 7 am to 6 pm Monday to Friday;
  - (b) 8 am to 1 pm Saturday; and
  - (c) At no time on Sundays or Public Holidays,

the Applicant must ensure that the noise from activities associated with the construction of the Project Rail Spur, Kamilaroi Highway Overpass and road realignments does not exceed the criteria in Table 3 at any residence on privately-owned land, unless otherwise agreed by the Planning Secretary.

**Table 3: Project construction noise criteria dB(A)**

Land <sup>a</sup>	Construction Noise Criteria
	L <sub>Aeq</sub> (15min)
223	49

224	56
All privately-owned residences	45

<sup>a</sup> The locations referred to in Table 3 are shown in Appendix 1

- B6. If the Applicant proposes to undertake any construction works outside the hours specified in conditions C1 and C2, then the Applicant must prepare and implement an Out of Hours Work Protocol for these works to the satisfaction of the Planning Secretary. This protocol must be prepared in consultation with the EPA and the residents who would be affected by the noise generated by these works, and be consistent with the requirements of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The Applicant shall not carry out any out of hours construction works before this protocol has been approved by the Planning Secretary.

**Note:** For areas where construction noise from the Project Rail Spur is predicted to be at or below 40 dB(A) and/ or below the operational noise criteria in Table 1 at sensitive receptors, this is likely to provide sufficient justification to operate outside of recommended standard hours as specified in the ICNG.

#### Project Rail Spur Operational Noise Criteria

- B7. The Applicant must ensure that noise generated by transporting coal on the Project Rail Spur does not exceed the criteria in Table 4 at any residence on privately-owned land.

**Table 4: Project Rail Spur noise criteria dB(A)**

Land <sup>a</sup>	Day	Evening	Night
	L <sub>Aeq</sub> (11 hr)	L <sub>Aeq</sub> (4 hr)	L <sub>Aeq</sub> (9 hr)
144 <sup>b</sup>	50	45	42
All privately-owned residences	50	45	40

<sup>a</sup> The locations referred to in Table 4 are shown in Appendix 1

<sup>b</sup> Applicable only to the DA approved dwelling on this property once it has been constructed

- B8. The noise criteria in Table 4 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

#### Public Road Traffic Noise Criteria

- B9. The Applicant, together with the owners of the Tarrawonga coal mine, must ensure that the noise generated on public roads by the development and the other mine does not exceed the criteria in Table 5 at any existing residence on privately-owned land.

**Table 5: Road traffic noise criteria dB(A)**

Land	Day and Evening L <sub>Aeq</sub> (15 hour)	Night L <sub>Aeq</sub> (9 hour)
All privately-owned residences	60	55

**Note:** Traffic noise generated by the development is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy (Department of Environment and Climate Change, 2011).

- B10. The noise criteria in Table 5 do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

#### Project Rail Spur Noise impacts

- B11. The Applicant must:

- prior to commencing the construction of the Project Rail Spur:
  - commission suitably qualified and experienced person/s to review the design of the Project Rail Spur, and determine whether it incorporates all reasonable and feasible noise mitigation measures, including suitable measures to minimise low frequency noise; and
  - provide the Planning Secretary with a report summarising the recommended noise mitigation measures and the proposed measures to be incorporated in the design of the Project Rail Spur;
- implement the recommendations of this acoustic review in condition (a);
- undertake commissioning trials of the Project Rail Spur to determine the optimal train speed to minimise noise impacts; and
- following commissioning of the spur line, undertake targeted noise monitoring to determine the accuracy of predicted acoustic impacts and effectiveness of any noise reduction measures, including monitoring during adverse inversion conditions, to be described in the Noise Management Plan required by condition B15,



to the satisfaction the Planning Secretary.

#### **Attenuation of Plant**

B12. The Applicant must:

- (a) ensure that:
  - (i) when ROM coal extraction exceeds 3.5 Mt in a financial year, all mining trucks and water carts used on the site are commissioned as noise suppressed (or attenuated) units;
  - (ii) where reasonable and feasible, improvements are made to existing noise suppression equipment as better technologies become available; and
- (b) monitor and report on the implementation of these requirements annually on its website.

B13. The Applicant must:

- (a) conduct a testing program of the attenuated plant on site, with each item of plant tested at no greater than 3 yearly intervals, to ensure that the attenuation remains effective and maintained within in-service tolerances;
- (b) restore the effectiveness of any attenuation if it is found to be defective; and
- (c) report on the results of any testing and/or attenuation work annually on its website, including a summary of any implications for meeting compliance objectives.

#### **Noise Operating Conditions**

B14. The Applicant must:

- (a) take all reasonable steps to minimise all noise from construction, operational and transport activities (including by not dumping on exposed areas of the Western Emplacement Areas at night), including low frequency noise and other audible characteristics, as well as road and rail noise associated with the development, particularly during noise-enhancing meteorological conditions;
- (b) implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas, including but not limited to the following:
  - (i) partial cladding of the CHPP using acoustic lining;
  - (ii) partial cladding of the ROM bin using acoustic lining; and
  - (iii) covers and/or cladding of conveyors;
- (c) monitor and record all major equipment use and make this data readily available at the request of the Department or the EPA;
- (d) operate a comprehensive noise management system that uses a combination of meteorological forecasts, predictive noise modelling and real-time monitoring to guide the day to day planning of mining operations and the implementation of adaptive management both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
- (e) record the daily adaptive management measures implemented on the site, including how operations were modified or stopped to comply with the noise criteria in Table 1, and make these records readily available at the request of the Department or the EPA;
- (f) ensure that the Project Rail Spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);
- (g) use its best endeavours to ensure that the rolling stock supplied by service providers on the Project Rail Spur line is designed, constructed and maintained to minimise noise;
- (h) ensure any new rail rolling stock manufactured specifically for the development is designed, constructed and maintained to minimise noise; and
- (i) carry out regular attended noise monitoring (at least once a month, unless otherwise agreed by the Planning Secretary) to determine whether the development is complying with the relevant conditions of this consent.

#### **Noise Management Plan**

B15. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s;
- (b) be prepared in consultation with the EPA;
- (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
- (d) describe the measures to be implemented to ensure:
  - (i) compliance with the noise criteria and operating conditions of this consent;
  - (ii) best practice management is being employed; and
  - (iii) noise impacts of the development are minimised during noise-enhancing meteorological conditions;

- (e) describe the measures that would be implemented to ensure the noise impacts from the construction and operation of the Kamilaroi Highway overpass and Project Rail Spur are minimised as far as practicable;
- (f) describe the measures to minimise road traffic noise generated by employee commuter vehicles on public roads;
- (g) describe the noise management system in detail;
- (h) describe the fleet attenuation and testing program; and
- (i) include a monitoring program that:
  - (i) uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;
  - (ii) includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time;
  - (iii) adequately supports the noise management system;
  - (iv) includes a procedure for undertaking attended noise compliance monitoring; and
  - (v) includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event.

B16. The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.

## BLASTING

### Blasting Criteria

B17. The Applicant must ensure that blasting on the site does not cause exceedances of the criteria at the locations <sup>a</sup> in Table 6.

**Table 6: Blasting criteria**

<b>Location</b>	<b>Airblast overpressure (dB(Lin Peak))</b>	<b>Ground vibration (mm/s)</b>	<b>Allowable exceedance</b>
Residence on privately-owned land	120	10	0%
	115	5	5% of the total number of blasts over a calendar year
Kurrumbede <sup>b</sup>	133	10	0%
All other public infrastructure		50 (or a limit determined by the structural design methodology in AS 2187.2 - 2006, or other alternative limit for public infrastructure, to the satisfaction of the Planning Secretary)	0%

**Notes:**

<sup>a</sup> The locations referred to in Table 6 are shown in Appendix 1 and Appendix 5.

<sup>b</sup> Unless a more appropriate criterion is established by the structural engineer's findings in condition B72 and agreed to by the Planning Secretary.

B18. The blasting criteria in Table 6 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the blasting criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

### Blasting Hours

B19. The Applicant must only carry out blasting on the site between 9 am and 5 pm (Monday to Saturday inclusive). No blasting is allowed on Sundays, public holidays or any other time without the prior written approval of the Planning Secretary.

### Blasting Frequency

B20. The Applicant may carry out a maximum of:

- (a) 1 single blast event<sup>a</sup> a day; and
- (b) 5 single blast events<sup>a</sup> a week, averaged over a calendar year.



- B21. Condition B20 does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

**Note:** *<sup>a</sup> Within conditions B20 and B21, a 'single blast event' means a blast which involves either a single detonation or a number of individual blasts fired in quick succession in a discrete area of the development. Should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast event.*

### Property Inspections

- B22. If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of any approved open cut mining pit on the site for a property inspection to establish the baseline condition of any buildings and structures on their land, or to have a previous property inspection updated, then within two months of receiving this request the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:
    - (i) establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and
    - (ii) identify measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and structures; and
  - (b) give the landowner a copy of the new or updated property inspection report.
- B23. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Planning Secretary for resolution.

### Property Investigations

- B24. If the owner of any privately-owned land within 2 kilometres of any approved open cut mining pit on the site or any other landowner where the Planning Secretary is satisfied an investigation is warranted, claims in writing that buildings or structures on their land have been damaged as a result of blasting on the site, then within two months of receiving this written claim the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and
  - (b) give the landowner a copy of the property investigation report.
- B25. If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Planning Secretary.
- B26. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution.

### Blast Operating Conditions

- B27. The Applicant must:
- (a) take all reasonable steps to:
    - (i) ensure the safety of people and livestock from blasting impacts of the development;
    - (ii) protect public and private infrastructure and property in the vicinity of the site from blasting damage associated with the development; and
    - (iii) minimise the dust and fume emissions of any blasting;
  - (b) ensure that blasting on the site does not damage heritage items<sup>a</sup>, including Aboriginal grinding groove site 20-04-0009 and the Kurrumbede Homestead and outbuildings, except in accordance with the predictions in the document/s listed in condition A2(c), and develop specific measures to protect heritage items outside the approved disturbance areas from any blasting damage associated with the development;
  - (c) operate a comprehensive blast management system that uses a combination of meteorological forecasts and predictive blast modelling to guide the planning of blasts to minimise blasting impacts;
  - (d) minimise the frequency and duration of any public road closures for blasting, and use all reasonable efforts to avoid road closures during peak traffic periods;
  - (e) operate a suitable system to enable interested members of the public to get up-to-date information on the proposed blasting schedule on the site and any associated public road closures, including notification via SMS message of the blasting schedule and associated road closures for that day and any variations to that schedule and closures;
  - (f) use all reasonable efforts to co-ordinate the timing of blasting at the site with nearby mines to minimise cumulative blasting impacts; and
  - (g) carry out regular blast monitoring to determine whether the development is complying with the relevant conditions of this consent.

**Note:** <sup>a</sup> The locations of the heritage items referred to in paragraph (b) are shown in Appendix 5.

- B28. The Applicant must not undertake blasting on the site within 500 metres of any public road or any land outside the site not owned by the Applicant, unless the blast generates ground vibration of 0.5 mm/s or less, or the Applicant has:
- (a) a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the public road or land, and the Applicant has advised the Department in writing of the terms of this agreement; or
  - (b) demonstrated, to the satisfaction of the Planning Secretary, that the blasting can be carried out closer to the public road or land without compromising the safety of people or livestock or damaging the road or other buildings and structures, and updated the Blast Management Plan to include specific mitigation measures to be implemented while blasting is being carried out within 500 metres of the road or land.

#### **Blast Management Plan**

- B29. The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with the EPA;
  - (c) be submitted to the Planning Secretary for approval prior to carrying out any blasting operations on site under this consent;
  - (d) describe the blast management system and the measures that will be implemented to ensure compliance with the blasting criteria and conditions of this consent;
  - (e) include a Blast Fume Management Strategy for:
    - (i) minimising blast fume emissions;
    - (ii) rating and recording blast fume events in accordance with *Visual NOx Fume Rating Scale* (AEISG, 2011), or equivalent monitoring technique; and
    - (iii) reporting significant blast fume events to the Department and the EPA;
  - (f) include a Road Closure Management Plan for any blasting within 500 metres of a public road, that has been prepared in consultation with GSC and NSC and includes provisions for:
    - (i) minimising the duration of closures, both on a per event basis and weekly basis;
    - (ii) avoiding peak traffic periods as far as reasonable; and
    - (iii) co-ordinating closures with nearby mines to minimise the cumulative effect of road closures;
  - (g) identify any agreed alternative ground vibration limits for public or private infrastructure in the vicinity of the site (if relevant); and
  - (h) include a monitoring program for evaluating and reporting on compliance with the relevant conditions of this consent.

- B30. The Applicant must implement the Blast Management Plan as approved by the Planning Secretary.

#### **AIR QUALITY AND GREENHOUSE GAS**

##### **Odour**

- B31. Unless otherwise authorised by an EPL, the Applicant must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

##### **Air Quality Criteria**

- B32. The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Table 7 at any residence on privately-owned land.

**Table 7:** Air quality criteria

<i>Pollutant</i>	<i>Averaging period</i>	<i>Criterion</i>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a, c</sup> 25 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a, c</sup> 8 µg/m <sup>3</sup>
	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>
Total suspended particulate (TSP) matter	Annual	<sup>a, c</sup> 90 µg/m <sup>3</sup>



**Notes:**

<sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).

<sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own).

<sup>c</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agreed by the Planning Secretary.

- B33. The air quality criteria in Table 7 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the air quality criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

**Mine-owned Land**

- B34. Particulate matter emissions generated by the development must not exceed the criteria listed in Table 7 at any occupied residence on mine-owned land (including land owned by another mining company) unless:
- (a) the tenant and landowner (if the residence is owned by another mining company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under Part D of this consent;
  - (b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving 14 days notice;
  - (c) air quality monitoring is regularly undertaken to inform the tenant and landowner (if the residence is owned by another mining company) of the likely particulate matter emissions at the residence; and
  - (d) data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.

**Air Quality Operating Conditions**

- B35. The Applicant must:
- (a) take all reasonable steps to:
    - (i) minimise odour, fume and particulate matter (including PM<sub>10</sub> and PM<sub>2.5</sub>) emissions of the development, paying particular attention to minimising wheel-generated haul road emissions;
    - (ii) improve energy efficiency and reduce Scope 1 and Scope 2 greenhouse gas emissions of the development;
    - (iii) minimise any visible off-site air pollution generated by the development; and
    - (iv) minimise the extent of potential dust generating surfaces exposed on the site at any given point in time;
  - (b) ensure that all 'non-road' mobile diesel equipment used in undertaking the development includes reasonable and feasible diesel emissions reduction technology;
  - (c) operate a comprehensive air quality management system that uses a combination of meteorological forecasts, predictive air quality modelling and real-time monitoring to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
  - (d) minimise air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note c to Table 7 above);
  - (e) carry out regular air quality monitoring to determine whether the development is complying with the relevant conditions of this consent; and
  - (f) regularly assess meteorological and air quality monitoring data and modify operations on the site to ensure compliance with the relevant conditions of this consent.

**Air Quality and Greenhouse Gas Management Plan**

- B36. The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (b) be prepared in consultation with the EPA;
  - (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
  - (d) describe the measures to be implemented to ensure:
    - (i) compliance with the air quality criteria and operating conditions of this consent;
    - (ii) best practice management is being employed (including in respect of minimisation of greenhouse gas emissions from the site and energy efficiency) to:
      - minimise the development's air quality impacts;

- minimise the development's Scope 1 and 2 greenhouse gas emissions; and
  - improve the development's energy efficiency; and
- (iii) the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
- (e) describe the air quality management system in detail; and
- (f) include an air quality monitoring program, undertaken in accordance with the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007), that:
- (i) uses monitors to evaluate the performance of the development against the air quality criteria in this consent and to guide day to day planning of mining operations;
  - (ii) adequately supports the air quality management system; and
  - (iii) includes a protocol for identifying any air quality-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of these events.

B37. The Applicant must implement the Air Quality and Greenhouse Gas Management Plan as approved by the Planning Secretary.

#### **METEOROLOGICAL MONITORING**

B38. Prior to commencing mining operations under this consent and for the remaining life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:

- (a) complies with the requirements in the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007);
- (b) is capable of continuous real-time measurement of wind speed, wind direction sigma theta and temperature; and
- (c) is capable of measuring meteorological conditions in accordance with the *Noise Policy for Industry* (EPA, 2017),

unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.

#### **WATER**

##### **Water Supply**

B39. The Applicant must

- (a) ensure that it has sufficient water for all stages of the development;
- (b) implement efficiency and best practice measures to minimise and conserve the use of water; and
- (c) if necessary, adjust the scale of the operations to match its available water supply.

B40. The Applicant must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.

**Note:** Under the *Water Act 1912* and/or the *Water Management Act 2000*, the Applicant is required to obtain all necessary water licences for the development, including during rehabilitation and post mine closure.

##### **Compensatory Water Supply**

B41. The Applicant must provide a compensatory water supply to any landowner of privately-owned land whose rightful water supply is adversely and directly impacted (other than an impact that is minor or negligible) as a result of mining operations, in consultation with DPIE Water, and to the satisfaction of the Planning Secretary.

B42. The compensatory water supply measures must provide an alternative long term supply of water that is equivalent, in quality and volume, to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner.

B43. If the Applicant and the landowner cannot agree on whether the loss of water is attributed to the development or the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution. The burden of proof that any loss of water supply is not due to mining impacts rests with the Applicant.

B44. If the Applicant is unable to provide an alternative long term supply of water, then the Applicant must provide compensation, to the satisfaction of the Planning Secretary.

B45. However, conditions B41 to B44 do not apply if the Applicant has a compensatory water agreement with the owner/s of the land and the Applicant has advised the Department in writing of the terms of this agreement.

**Note:**

- The *Water Management Plan* (see condition 28) is required to include trigger levels for investigating potentially adverse impacts on water supplies.



## Water Discharges

B46. The Applicant must ensure that all surface discharges from the site comply with:

- (a) discharge limits (both volume and quality) set for the development in any EPL; or
- (b) relevant provisions of the POEO Act.

## Mine Water Storages

B47. The Applicant shall implement all reasonable and feasible measures to prevent migration of saline water from the mine water storages or provide suitable measures to offset the salinity impacts on the Namoi River, to the satisfaction of the EPA and the Planning Secretary.

## Flooding

B48. The Applicant shall ensure that the design and construction of the project, including the Project Rail Spur and Kamlaroi Highway overpass, is consistent with the objectives of the *Floodplain Management Plan for the Upper Namoi Valley Floodplain 2019*, to the satisfaction of the Planning Secretary.

B49. The Project Rail Spur, Project Rail Spur bridges and any upgrade to the haul road must be designed and constructed to minimise flooding and scouring impacts, in consultation with BCD and consistent with the recommendations of the Department's flood peer review. The design and construction of the Project Rail Spur must provide for its complete elevation above the 1% Average Exceedance Probability flood level west of the Namoi River, generally in accordance with the EIS. Prior to construction of the Project Rail Spur or any upgrades to the haul road, the Proponent shall undertake a flood assessment of the detailed design to confirm there would be minimal impacts as predicted in the documents listed in condition A2(c).

## Namoi River Pipeline

B50. Prior to the construction of the Namoi River pipeline and pump station, the Applicant shall:

- (a) consult with DPI - NSW Fisheries regarding the general operation and design of the pump station and screens to avoid and mitigate impacts on native fish;
- (b) consult with GSC regarding the design and construction of the pipeline in the Braymont Road Reserve; and
- (c) implement all reasonable and feasible recommendations from DPI - NSW Fisheries and GSC in regard to the design and construction of the pipeline and pump station,

to the satisfaction of the Planning Secretary.

## Water Management Performance Measures

B51. The Applicant must ensure that the development complies with the performance measures in Table 8.

**Table 8:** *Water management performance measures*

Feature	Performance Measure
Water management – General	<ul style="list-style-type: none"><li>• Maintain the clean water management system separate from the dirty (i.e. sediment laden) and mine water management systems</li><li>• Minimise the use of clean and potable water</li><li>• Maximise water recycling, reuse and sharing opportunities</li><li>• Maximise the capture and reuse of mine water and dirty water to meet operational demands for water, including dust suppression activities</li><li>• Minimise the use of make-up water from licensed external sources</li><li>• Design, install, operate and maintain water management infrastructure in a proper and efficient manner</li><li>• Minimise risks to the receiving environment and downstream water users</li></ul>
Alluvial aquifers	<ul style="list-style-type: none"><li>• Negligible impacts to alluvial aquifers caused by the development beyond those predicted in the document/s listed in condition A2(c), including:<ul style="list-style-type: none"><li>– negligible impacts to water quality;</li><li>– negligible change in groundwater levels; and</li><li>– negligible impact to other groundwater users;</li></ul></li><li>• Comply with the Minimal Impact Consideration for Aquifer Interference Activities for Alluvial Water Source (highly productive groundwater sources) under the <i>NSW Aquifer Interference Policy</i> (DPI, 2012)</li></ul>

<b>Feature</b>	<b>Performance Measure</b>
Erosion and sediment control works	<ul style="list-style-type: none"> <li>Design, install and maintain erosion and sediment controls in accordance with the best management practice guidance series <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom, 2004) and <i>2E Mines and Quarries</i> (DECC, 2008)</li> <li>Design, install and maintain any new infrastructure within 40 metres of watercourses in accordance with the guidance series for <i>Controlled Activities on Waterfront Land</i> (DPI Water, 2012) or latest versions</li> <li>Design, install and maintain any creek crossings in accordance with the <i>Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management</i> (DPI, 2013) and <i>Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings</i> (NSW Fisheries, 2003), or their latest versions</li> </ul>
Flood protection works	<ul style="list-style-type: none"> <li>Design, install and maintain flood levees to protect mining areas from a probable maximum flood event and to ensure no increased flooding impacts on roads or privately-owned land</li> </ul>
Construction and operation of linear infrastructure	<ul style="list-style-type: none"> <li>Design and construct the Project Rail Spur and Kamilaroi Highway overpass such that this infrastructure will not cause significant increased flooding, in particular increased affluxes and velocities at key locations, redistribution in and around the overpass, and flood levels at residences</li> </ul>
Clean water diversions and storage infrastructure	<ul style="list-style-type: none"> <li>Design, install and maintain the clean water system to capture and convey the 100 year ARI flood event</li> <li>Maximise, as far as reasonable, the diversion of clean water around disturbed areas on the site, except where clean water is captured for use on the site</li> </ul>
Sediment dams	<ul style="list-style-type: none"> <li>Design, install and maintain sediment dams in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom, 2004) and <i>2E Mines and Quarries</i> (DECC, 2008) and the requirements under the POEO Act</li> <li>Design, install and maintain sediment dams to include contingency measures to prevent the potential mobilisation of pollutants and ensure compliance with the requirements of the <i>Water Management Act 2000</i> and the EPL discharge criteria</li> </ul>
Mine water storages	<ul style="list-style-type: none"> <li>Design, install and maintain mine water storage infrastructure to ensure no discharge of mine water to the off-site environment</li> <li>New storages designed to contain the 100 year ARI storm event and minimise permeability</li> <li>Ensure adequate freeboard within all pit voids at all times to minimise the risk of discharge to surface waters and groundwater</li> </ul>
In-pit emplacement of acid forming and potentially acid forming materials	<ul style="list-style-type: none"> <li>Emplacement, encapsulation, treatment and/or capping to prevent the migration of pollutants beyond the pit shell</li> <li>Adequate freeboard within the pit void to minimise the risk of discharge to surface waters</li> </ul>
Overburden emplacements	<ul style="list-style-type: none"> <li>Design, install and maintain emplacements to encapsulate and prevent migration of acid forming and potentially acid forming materials, and saline and sodic material</li> <li>Design, install and maintain out-of-pit emplacements to prevent and/or manage long term saline seepage</li> </ul>
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> <li>Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standard</li> </ul>
Creek diversions	<ul style="list-style-type: none"> <li>Diverted creek lines are hydraulically and geomorphologically stable</li> <li>Incorporate erosion control measures based on vegetation and engineering revetments</li> <li>Incorporate water features such as persistent/permanent pools for aquatic habitat</li> <li>Revegetate with suitable riparian vegetation</li> </ul>
Aquatic and riparian ecosystems	<ul style="list-style-type: none"> <li>Negligible environmental consequences beyond those predicted in the document/s listed in condition A2(c)</li> <li>Maintain or improve baseline channel stability</li> <li>Develop site-specific in-stream water quality objectives in accordance with the <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> (ANZECC &amp; ARMCANZ, 2000) and <i>Using the ANZECC Guidelines and Water Quality Objectives in NSW</i> (DEC, 2006)</li> </ul>

B52. The performance measures in Table 8 do not apply to water management structures constructed under previous consents.



## Water Management Plan

B53. The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with DPIE Water and the EPA;
- (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
- (d) describe the measures to be implemented to ensure that the Applicant:
  - (i) complies with the water management performance measures (see Table 8); and
  - (ii) addresses the recommendations for surface and groundwater monitoring programs by the Commonwealth Independent Expert Scientific Committee on Coal Seam Gas and Large Mining Development (IESC) (*IESC 2018-099: Vickery Extension Project (EPBC 2016/7649 and SSD 7480) – Expansion*);
- (e) incorporate recent meteorological and climate data and describe the periodic review of new and relevant input data, including sensitivity analysis of variations from climate projections and trends;
- (f) utilise existing data from nearby mines and build on existing monitoring programs, where practicable;
- (g) include a:
  - (i) **Site Water Balance** that includes details of:
    - predicted annual inflows to and outflows from the site;
    - sources and security of water supply for the life of the development (including authorised entitlements and licences);
    - prioritisation strategy for water sources, including the strategy to maximise the reuse of mine water and dirty water for the development;
    - water storage capacity;
    - water use and management on the site, including any water transfers or sharing with neighbouring mines and opportunities to improve the efficiency of site water use and minimise the use of clean water on the site;
    - licenced sources of external water supply for the development which could be utilised as a contingency measure in the event of extreme climatic conditions
    - licensed discharge points and limits; and
    - reporting procedures, including the annual preparation of an updated site water balance;
  - (ii) **Salt Balance** that includes details of:
    - sources of saline material on the site;
    - saline material and saline water management on the site;
    - measures to minimise discharge of saline water from the site; and
    - reporting procedures, including the annual preparation of an updated salt balance;
  - (iii) **Erosion and Sediment Control Plan** that:
    - is consistent with the best management practice requirements of Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) and Volume 2E: Mines and Quarries (DECC, 2008);
    - identifies activities that could cause soil erosion, generate sediment or affect flooding;
    - includes a program to review the adequacy of flood protection works, and ensure they comply with the relevant performance measures listed in Table 8;
    - describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;
    - describes the location, function, and capacity of erosion and sediment control structures and flood management structures; and
    - describes what measures would be implemented to maintain (and if necessary decommission) the structures over time;
  - (iv) **Surface Water Management Plan** that includes:
    - detailed baseline data on surface water flows and quality of watercourses and/or water bodies potentially impacted by the development, including:
      - stream and riparian vegetation health;
      - channel stability (geomorphology); and
      - water supply for other surface water users;

- a detailed description of the surface water management system, including the separation of water captured on the site and uses associated with the:
  - clean water capture and diversion system;
  - dirty water system (including sediment detention basins); and
  - mine water capture system;
- detailed plans, design objectives and performance criteria for water management infrastructure, including:
  - any approved creek diversions or restoration works associated with the development;
  - water run-off diversions and catch drains;
  - clean water storages, mine water storages and sediment dams;
  - emplacement areas;
  - backfilled pits and any final voids for the development (see also Table 12); and
  - reinstated drainage networks on rehabilitated areas of the site;
- detailed performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts (or trends) associated with the development, for:
  - downstream surface water flows and quality;
  - channel stability;
  - downstream flooding impacts;
  - stream and riparian vegetation health;
  - water supply for other water users; and
  - post-mining water pollution from rehabilitated areas of the site;
- a program to monitor and evaluate:
  - compliance with the relevant performance measures listed in Table 8 and the performance criteria in this plan;
  - water quality in sediment dams prior to discharge into the environment;
  - controlled and uncontrolled discharges and seepage/leachate from the site;
  - impacts on water supply for other water users;
  - surface water inflows, outflows and storage volumes, to inform the Site Water Balance;
  - the effectiveness of the surface water management system, including contingency measures to be implemented during a potential failure of the water management system infrastructure, and
  - the effectiveness of the measures in the Erosion and Sediment Control Plan;
- reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results; and
- a trigger action response plan to respond to any exceedances of the performance measures or performance criteria, and repair, mitigate and/or offset any adverse surface water impacts of the development;

(v) **Groundwater Management Plan** that includes:

- detailed baseline data of groundwater levels, yield and quality for groundwater resources potentially impacted by the development, including groundwater supply for other water users;
- a detailed description of the groundwater management system;
- groundwater performance criteria, including trigger levels for identifying and investigating any potentially adverse groundwater impacts associated with the development, on:
  - regional and local aquifers (alluvial and hardrock); and
  - groundwater supply for other water users such as licensed privately-owned groundwater bores;
- a program to monitor and evaluate:
  - compliance with the relevant performance measures listed in Table 8 and the performance criteria in this plan;
  - inputs and outputs from water storages (groundwater, surface water and atmospheric water), including any final void;
  - geochemical characteristics of groundwater flows to the open cut, to inform the progressive development of the final landform and optimise the final void dimensions, to be described in the rehabilitation strategy required by condition B104.
  - groundwater inflows, outflows and storage volumes, to inform the Site Water Balance;
  - the likelihood of any indirect impacts from the development on nearby alluvial aquifers;



- the hydrogeological properties used in the groundwater modelling, including the basement volcanics; and
  - the effectiveness of the groundwater management system;
  - reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results;
  - a trigger action response plan to respond to any exceedances of the groundwater performance criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development; and
  - a program to periodically validate the groundwater model for the development, including an independent review of the model every 5 years, and at least annual comparison of monitoring results with modelled predictions;
- (vi) a protocol to report on the measures, monitoring results and performance criteria identified above, in the Annual Review referred to in condition E9; and
- (h) include detailed performance and completion criteria for evaluating the performance of the Water Management Plan, and triggering remedial action (if necessary).

B54. The Applicant must implement the Water Management Plan as approved by the Planning Secretary.

## BIODIVERSITY

### Translocation of Threatened Species

B55. The Applicant shall use its best endeavours to successfully translocate the Winged Peppercreep located within the disturbance boundary.

### Biodiversity Offset Strategy – transferred obligations from Vickery Coal Project as modified by the Vickery Extension Project

B56. The Applicant shall implement the biodiversity offset strategy described in the EIS, summarised in Table 9 and shown conceptually in Appendix 4, to the satisfaction of the Planning Secretary.

**Table 9: Summary of the biodiversity offset strategy – Vickery Coal Project**

Area	Offset Type	Minimum Size (hectares)
Willeroi East Offset Area	Existing vegetation to be enhanced, and additional vegetation to be established with the restoration of at least 156 ha of Box Gum Woodland EEC, as listed under the BC Act	1,671
Areas 2, 3, 4 & 5	Existing vegetation to be enhanced with the restoration of at least 127 ha of Poplar Box Woodland and 45 ha of Box Gum Woodland EEC, as listed under the BC Act	404.5
Rehabilitation Area	Re-establishment of native vegetation communities for a biodiversity conservation land use objective.	1,360

**Notes:**

- For the purposes of this consent Box Gum Woodland refers to the EEC listed as White Box Yellow Box Blakely's Red Gum Woodland under the TSC Act, or similar EEC as may be updated from time to time.
- Any area of the offset strategy in Table 9 may be substituted with an alternative offset area subject to demonstration of equivalent biodiversity outcomes and to the satisfaction of the Secretary

### Long Term Security of Offset

B57. The Applicant shall make suitable arrangements to provide appropriate long term security for the offset areas in Table 9:

- (a) within 2 years of the date of commencement of development under this consent unless otherwise agreed by the Planning Secretary, for the Willeroi East Offset Area and Offset Areas 2, 3, 4 and 5; and
- (b) within 6 months of cessation of mining operations, unless otherwise agreed by the Planning Secretary, for the woodland to be established in the Rehabilitation Area, as identified in Table 9,

to the satisfaction of the Planning Secretary.

**Note:** The Department acknowledges that the Applicant is investigating the potential to transfer part or all of the Willeroi East Offset Area directly to the national park estate, and accepts that interim conservation measures may be implemented prior to this transfer.

## Additional Biodiversity Offsets Required – Vickery Extension Project

- B58. In addition to the biodiversity offset requirements in Table 9, within 2 years of the date of commencement of development under this consent, unless otherwise agreed by the Planning Secretary the Applicant must retire biodiversity credits of a number and class specified in Table 10 and Table 11 below to offset the biodiversity impacts of the development.
- B59. The retirement of these credits must be carried out in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* and can be achieved by acquiring or retiring 'biodiversity credits' within the meaning of the BC Act.

**Table 10: Ecosystem credit requirements**

Ecosystem credits	Code (BVT)	Code (PCT)	Credits Required
Poplar Box Woodland on Alluvial Clay Soils	NA185	101	3,540
Pilliga Box – Poplar Box Shrubby Woodland	NA324	397	6,955
White Box – Silver-leaved Ironbark Shrubby Open Forest	NA349	594	1,795
Narrow-leaved Ironbark – White Box Shrubby Forest	NA311	459	4,025
Mixed Marsh Sedgeland	NA201	53	46
River Red Gum Riparian Tall Woodland	NA193	78	40

**Table 11: Species credit requirements**

Species	Credits Required
Regent Honeyeater ( <i>Anthochaera phrygia</i> )	3,703
Squirrel Glider ( <i>Petaurus norfolcensis</i> )	1,672
Koala ( <i>Phascolarctos cinereus</i> )	1,308

**Notes:**

- The credits in Table 10 and Table 11 were calculated in accordance with Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEH, 2014) and would need to be converted to reasonably equivalent 'biodiversity credits', within the meaning of the BC Act, if the credits are to be retired in accordance with the Biodiversity Offsets Scheme of the BC Act. Under this conversion the species credits for the Regent Honeyeater would be converted to ecosystem credits,
- Following repeal of the Threatened Species Conservation Act 1995 on 25 August 2017, credits created under that Act are taken to be "biodiversity credits" under the Biodiversity Conservation Act 2016 by virtue of clause 22 of the Biodiversity Conservation (Savings and Transitional) Regulation 2017

## Ecological Rehabilitation Ecosystem Credits

- B60. Retirement of the ecosystem credits in Table 10 can include undertaking ecological rehabilitation at the site in accordance with Section 12.2 of the *Framework for Biodiversity Assessment of the NSW Biodiversity Offsets Policy for Major Projects* (OEH, 2014), as identified in the approved Rehabilitation Management Plan required under condition B106.

*Note: Under the FBA, the ecosystem credits are considered retired once the credits and information requirements under Section 12.2 of the FBA are documented in the Rehabilitation Management Plan.*

- B61. Within 12 months of triggering remedial action under the Rehabilitation Management Plan for alternative mechanism for retirement of ecological rehabilitation credits, unless otherwise agreed by the Planning Secretary, the Applicant must acquire or retire the relevant biodiversity credits within the meaning of the BC Act.

## Retirement of Credits Status Reports

- B62. From the date of commencement of development under this consent until the credit requirements have been retired, the Applicant must submit a six monthly report to the Department on progress towards retirement of credits required in Table 10 and Table 11.

## Biodiversity Management Plan

- B63. The Applicant must prepare a Biodiversity Management Plan to the satisfaction of the Planning Secretary. This plan must:
- be prepared by a suitably qualified and experienced person/s;
  - be prepared in consultation with BCD and North West LLS;
  - be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;



- (d) describe the short, medium, and long-term measures to be undertaken to manage vegetation and fauna habitat on the site and in the biodiversity offset strategy areas required under Condition B56 (see note below the table);
- (e) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy required under Condition B56, and triggering remedial action (if necessary);
- (f) describe how biodiversity management would be integrated with similar measures within other management plans, including the Rehabilitation Management Plan referred to in condition B106;
- (g) describe the measures to be implemented within the approved disturbance areas to:
  - (i) minimise the amount of clearing;
  - (ii) minimise impacts on fauna, including undertaking pre-clearance surveys;
  - (iii) translocate and protect the population of Winged Peppercreep located on the site, including detailed description of a monitoring and maintenance program; and
  - (iv) maximise the salvage of resources, including tree hollows, vegetation and soil resources, for beneficial reuse, including fauna habitat enhancement;
- (h) describe the measures to be implemented on the site to:
  - (i) minimise impacts on fauna habitat resources such as hunting and foraging areas, habitat trees, fallen timber and hollow-bearing trees;
  - (ii) enhance the quality of vegetation, vegetation connectivity and wildlife corridors through the planting of scattered trees, corridor enhancement measures and/or targeted revegetation associated with the Project Rail Spur of appropriate canopy, sub-canopy, understorey and ground strata;
  - (iii) introduce naturally scarce fauna habitat features such as salvaged tree hollows and logs and promote the use of these introduced habitat features by threatened fauna species;
  - (iv) manage any potential conflicts with Aboriginal heritage values;
  - (v) protect vegetation and fauna habitat outside of the approved disturbance areas;
  - (vi) manage the collection and propagation of seed from the local area;
  - (vii) control weeds, including measures to avoid and mitigate the spread of noxious weeds;
  - (viii) control feral pests with consideration of actions identified in relevant threat abatement plans;
  - (ix) control erosion;
  - (x) manage any grazing and agriculture;
  - (xi) control access to vegetated or revegetated areas; and
  - (xii) manage bushfire hazards;
- (i) include a seasonally-based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and improvements that could be implemented to improve biodiversity outcomes; and
- (j) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

**Note:** Any Biodiversity Offset Strategy Areas required under Condition B56 secured through a Biodiversity Stewardship Agreement under the BC Act do not require to be included in the Biodiversity Management Plan

B64. The Applicant must implement the Biodiversity Management Plan as approved by the Planning Secretary.

#### **Koala Plan of Management**

B65. The Applicant shall prepare and implement a Koala Plan of Management for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by suitably qualified and experienced person/s in consultation with BCD, NSC and GSC;
- (b) be submitted to, and approved by, the Planning Secretary prior to the commencement of construction under this consent;
- (c) be prepared generally in accordance the *Gunnedah Comprehensive Koala Plan of Management* and the draft Koala Plan of Management in the EIS;
- (d) include detailed performance and completion criteria for evaluating the performance of the plan, and triggering remedial action (if necessary);
- (e) detail the implementation of the Applicant's commitments to indirect koala mitigation measures, which must include measures at least equivalent to those identified in the EIS;
- (f) identify the potential risks to the successful implementation of the plan, and include a description of the contingency measures that would be implemented to mitigate against these risks;
- (g) include details of who would be responsible for monitoring, reviewing, and implementing the plan; and
- (h) be implemented prior to commencing construction and during operations under this consent.

**Note:** The Koala Plan of Management should be integrated with similar measures in the Biodiversity Management Plan.

## Conservation Bond

- B66. Within 6 months of approval of the Biodiversity Management Plan, the Applicant shall lodge a Conservation Bond with the Department to ensure that the biodiversity offset strategy required by condition B56 is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.

The sum of the bond shall be determined by:

- (a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and
- (b) employing a suitably qualified quantity surveyor to verify the calculated costs,

to the satisfaction of the Planning Secretary.

- B67. The calculation of the Conservation Bond must be submitted to the Department for approval at least 1 month prior to lodgement of the bond.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond.

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Planning Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.

### Notes:

- *Alternative funding arrangements for long term management of the biodiversity offset strategy required under Condition B56, such as provision of capital and management funding as part of a Stewardship Agreement or transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity bond.*
- *The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy.*
- *Offset areas secured via Stewardship Agreement do not require lodgement of a conservation bond.*

## HERITAGE

### Protection of Aboriginal Heritage

- B68. The Applicant must ensure that the development does not cause any direct or indirect impact on any identified heritage items located outside the approved disturbance area, beyond those predicted in the document/s listed in condition A2(c).

**Note:** *Identified heritage items are shown in the figure in Appendix 5.*

- B69. The Applicant must ensure that all known Aboriginal objects or Aboriginal places on the site and within any offset areas are properly recorded, and those records are kept up to date, in the Aboriginal Heritage Information Management System (AHIMS) Register.

### Aboriginal Cultural Heritage Management Plan

- B70. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development. The plan must:

- (a) be prepared by suitably qualified and experienced persons;
- (b) be prepared in consultation with BCD and Registered Aboriginal Parties;
- (c) be submitted to the Planning Secretary for approval prior to carrying out construction under this consent;
- (d) describe the measures to be implemented on the site to:
  - (i) comply with the heritage-related operating conditions of this consent;
  - (ii) ensure all workers receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
  - (iii) protect, monitor and/or manage identified Aboriginal objects and Aboriginal places (including proposed archaeological investigations and salvage of objects within the approved disturbance area) in accordance with the commitments made in the document/s listed in condition A2(c);
  - (iv) protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development;
  - (v) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;
  - (vi) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and
  - (vii) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site; and
- (e) include a strategy for the care, control and storage of Aboriginal objects salvaged on the site, both during the life of the development and in the long term.

- B71. The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by the Planning Secretary.



## Historic Heritage

- B72. Prior to commencing blasting operations on the site, the Applicant must commission a suitably qualified structural engineer to inspect the condition of the main residence at the Kurrumbede Homestead Complex and outbuildings to confirm measures to minimise damage due to blasting, advise appropriate blasting criteria and recommend works to protect the structural integrity of the homestead.
- B73. The Applicant must prepare a Historic Heritage Management Plan for the development, in respect of all non-Aboriginal cultural heritage items, to the satisfaction of the Planning Secretary. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with the Heritage NSW, GSC and the Dorothea Mackellar Memorial Society and in accordance with the relevant Heritage Branch guidelines;
  - (c) describe how historic heritage values of the site would be recorded and preserved;
  - (d) identify all heritage items in the vicinity of the site and include a statement of significance for each item;
  - (e) for the Kurrumbede Homestead Complex and outbuildings, describe the measures to:
    - (i) manage appropriate future uses, including appropriate physical intervention in the heritage structures to facilitate those uses and potential wear and tear as a result of the use;
    - (ii) maintain and enhance historic landscaping around the Kurrumbede residence (especially screen planting) and manage any new landscaping;
    - (iii) verify the condition of the Kurrumbede residence and outbuildings prior to commencing construction;
    - (iv) monitor the physical condition of the Kurrumbede residence and outbuildings in response to dust and vibration impacts due to the development;
    - (v) ensure that the Kurrumbede residence and the outbuildings are made safe and weatherproof to prevent deterioration beyond normal wear and tear;
    - (vi) ensure that an appropriate use of the Kurrumbede Homestead Complex (including the residence) is maintained throughout the life of the development, including consideration of its use for cultural events and facilitating controlled public access;
    - (vii) minimise disturbance to the naturally occurring vegetation on the flood plain to the north of the Kurrumbede Homestead Complex, including the existing mature eucalyptus trees and historic screen plantings; and
    - (viii) ensure the end-of-mine remediation measures include a consideration for the Kurrumbede Homestead Complex to return to an open rural setting, including revegetation of waste rock emplacements and dam bunds; and
  - (f) describe the measures to be implemented on the site or within any offset areas to:
    - (i) ensure all workers on the site receive suitable heritage inductions prior to carrying out any activities which may cause impacts to historic heritage, and that suitable records are kept of these inductions;
    - (ii) protect heritage items located outside the approved disturbance area from impacts of the development, beyond those predicted in the document/s listed in condition A2(c);
    - (iii) undertake photographic/archival recording of the Weatherboard Home (Site 22), prior to disturbance; and
    - (iv) manage any new heritage items discovered during the life of the development;
- B74. The Applicant must not commence construction until the Historic Heritage Management Plan is approved by the Planning Secretary.
- B75. The Applicant must implement the Historic Heritage Management Plan as approved by the Planning Secretary.

## TRANSPORT

### Monitoring of Coal Transport

- B76. The Applicant must:
- (a) keep accurate records of the:
    - (i) amount of coal transported from the site (on a daily basis); and
    - (ii) date and time of each train movement generated by the development; and
  - (b) publish these records in the Annual Review.

### Road Maintenance

- B77. The Applicant shall maintain the existing road maintenance agreement with GSC for the maintenance of public roads affected by the development, to the satisfaction of GSC. The Applicant and GSC shall review and/or renew the agreement once cumulative road haulage exceeds 3.5 Mtpa or ceases following commissioning of the Project rail spur. If there is any dispute in relation to these agreements, then either party may refer the matter to the Planning Secretary for resolution.

## Restriction on Transport Routes

B78. The Applicant must ensure that

- (a) all over-dimensional vehicle access to and from the site is via Blue Vale Road and Hoad Lane; and
- (b) all heavy vehicle access to and from the site is via Blue Vale Road and Hoad Lane,

unless the applicable roads authority agrees otherwise.

**Note:**

- The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimension vehicles on the road network.

## Braymont Road

B79. No development-related traffic shall use Braymont Road to get to or from the site, except in an emergency to avoid the loss of lives, property and/or environmental harm.

This condition does not apply to any employees that may reside on Braymont Road, or to the infrequent use of the road for consultation, environmental monitoring, and inspection and maintenance of nearby infrastructure.

## Road Upgrades

B80. The Applicant shall:

- (a) construct the Blue Vale Road and Hoad Lane re-alignments as described and shown conceptually in the EIS;
- (b) construct all roads and intersections in accordance with Austroad guidelines; and
- (c) install appropriate lighting and advance warning signs at entry points to the private haul road and mine access road,

to the satisfaction of the relevant roads authority.

**Note:** Under the Roads Act 1993, the Applicant may require separate approvals from TfNSW, and/or the relevant Councils as the appropriate roads authorities prior to construction of, closure of or conducting mining operations within public roads.

B81. If there is any dispute between the Applicant and the relevant roads authority in implementing these requirements, then any of the parties may refer the matter to the Planning Secretary for resolution.

B82. The Applicant shall design, construct and maintain the Kamilaroi Highway Project Rail Spur overpass to the satisfaction of TfNSW and GSC, and shall bear all costs associated with the construction, maintenance and decommissioning of the overpass.

B83. The Applicant shall design, construct and maintain the Kamilaroi Highway haul road overpass to the satisfaction of TfNSW and GSC, and shall bear all costs associated with the construction, maintenance and decommissioning of the overpass.

B84. If the Kamilaroi Highway overpass or Project Rail Spur have not been commissioned within 5 years of the date of commencement of development under this consent, and every 5 years thereafter, the Applicant shall commission an Independent Traffic Audit of haulage operations on the Kamilaroi Highway and its intersections with Blue Vale Road and the CHPP access road, unless the Planning Secretary agrees otherwise. This audit must:

- (a) be prepared by a suitably qualified person whose appointment has been approved by the Planning Secretary;
- (b) review haulage records;
- (c) recommend measures to reduce or mitigate any adverse (or potentially adverse) impacts in the event that the road network is not performing satisfactorily; and
- (d) be submitted to the Planning Secretary within 2 months of being commissioned.

**Note:** The Planning Secretary may agree to alternative timing for the audits if the development has not commenced prior to December 2025.

B85. If the Independent Traffic Audit demonstrates that the intersections and section of haul route on the Kamilaroi Highway are not performing satisfactorily, the Applicant shall:

- (a) implement any reasonable and feasible recommendations from the audit to reduce or mitigate adverse impacts until the overpass is commissioned; or
- (b) construct and commission the Kamilaroi Highway overpass within 3 years of the date of the audit, unless the Planning Secretary agrees otherwise.

## Traffic Management Plan

B86. The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;



- (b) be prepared in consultation with TfNSW, GSC and NSC;
- (c) include details of all transport routes and traffic types to be used for development-related traffic;
- (d) include details of the measures to be implemented to minimise traffic safety issues and disruption to local road users during construction or decommissioning works, including:
  - (i) temporary traffic controls, including detours and signage;
  - (ii) notifying the local community about development-related traffic impacts;
  - (iii) minimising potential for conflict with school buses and stock movements;
  - (iv) responding to any emergency repair requirements or maintenance during construction and/or decommissioning; and
  - (v) a traffic management system for managing over-dimensional vehicles;
- (e) include arrangements to comply with cumulative coal haulage limits from the development and the Tarrawonga Coal Project;
- (f) a protocol to facilitate graziers access to the Travelling Stock Route from Blue Vale Road, subject to site safety and operational requirements;
- (g) include a monitoring program to audit vehicle movements, including the origin and destination of employees and contractors, against predictions in the EIS; and
- (h) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:
  - (i) adhere to posted speed limits or other required travelling speeds;
  - (ii) adhere to the designated transport routes; and
  - (iii) implement safe driving practices.

B87. If the construction and/or decommissioning of the development is to be staged, the obligations in this condition apply to each stage of construction and/or decommissioning.

B88. The Applicant must not commence construction until the Traffic Management Plan is approved by the Planning Secretary.

B89. The Applicant must implement the Traffic Management Plan as approved by the Planning Secretary.

## **VISUAL**

### **Visual Amenity and Lighting**

B90. The Applicant must:

- (a) take all reasonable steps to minimise the visual and off-site lighting impacts of the development and shield public views of the development;
- (b) minimise the lighting impacts of the development on the Siding Springs Observatory;
- (c) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure;
- (d) ensure no in-pit mobile lighting rigs shine directly above the pit wall and other mobile lighting rigs do not shine directly above the horizontal (except where required for emergency safety purposes);
- (e) ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*;
- (f) implement a landscaping strategy to shield public views of the development that includes a road-side tree planting and maintenance schedule;
- (g) provide for the establishment of trees and shrubs and/or the construction of vegetated mounding or bunding:
  - along the re-aligned Blue Vale Road
  - along the access road to the mine site; and
  - at other areas identified as necessary for the maintenance of satisfactory visual amenity; and
- (h) ensure that the visual appearance of all new buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape.

### **Additional Visual Impact Mitigation**

B91. Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations and on-site infrastructure during the development, the Applicant shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) to reduce the visibility of the mining operations and infrastructure from the residences on the privately-owned land.

These mitigation measures must be reasonable and feasible, and must be implemented within a reasonable timeframe.

If the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

Notes:

- The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.
- The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (ie. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts).
- Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 7.5 kilometres from the mining operations.

## WASTE

B92. The Applicant must:

- (a) take all reasonable steps to minimise the waste (including coal rejects) generated by the development;
- (b) classify all waste in accordance with the *Waste Classification Guidelines* (EPA, 2014);
- (c) dispose of all waste at appropriately licensed waste facilities;
- (d) manage on-site sewage treatment and disposal in accordance with the requirements of GSC and NSC; and
- (e) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review referred to in condition E9.

B93. Except for the receipt and disposal of coal reject from the Whitehaven CHPP and except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the *Protection of the Environment Operations (Waste) Regulation 2014*, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

B94. The Applicant must ensure that biosolids used on the site are managed in accordance with the *Environmental Guidelines: Use and Disposal of Biosolids Products* (EPA, 1997) (or its latest version).

## Waste Management Plan

B95. The Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared in consultation with EPA, GSC and NSC;
- (b) identify all waste types generated by the development; and
- (c) describe the measures to ensure the management of waste generated by, and received at, the development complies with the requirements of conditions B92 to B94.

B96. The Applicant must implement the Waste Management Plan as approved by the Planning Secretary.

## DANGEROUS GOODS

B97. The Applicant must ensure that the storage, handling, and transport of:

- (a) dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code; and
- (b) explosives are managed in accordance with the requirements of the Resources Regulator.

## BUSHFIRE MANAGEMENT

B98. The Applicant must:

- (a) ensure that the development:
  - (i) provides for asset protection in accordance with the relevant requirements in the *Planning for Bush Fire Protection* (RFS, 2019) guideline; and
  - (ii) ensure that there is suitable equipment to respond to any fires on the site; and
- (b) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.

B99. Prior to commencing mining operations under this consent, the Applicant must prepare a Bushfire Management Plan for the development in consultation with RFS. This plan must include a:

- (a) contact person and 24 hour contact phone number;
- (b) schedule and description of proposed bushfire mitigation works, including:
  - (i) location of managed and unmanaged vegetation within the site;
  - (ii) location of water supply; and
  - (iii) internal access roads;
- (c) plan identifying the location and storage of bulk flammable liquids and materials;
- (d) 'hot works' management plan, including:



- (i) circumstances when 'hot works' are limited or prohibited; and
- (ii) safety measures to be implemented when 'hot works' are being conducted; and
- (e) emergency/evacuation plan in accordance with the *Development Planning: A Guide to Developing a Bushfire Emergency Management and Evacuation Plan* (RFS, 2014) and *Australian Standard AS3745 Planning for Emergencies in Facilities*.

B100. The Applicant must implement the Bushfire Management Plan in consultation with RFS.

## REHABILITATION

### Rehabilitation Objectives

B101. The Applicant must rehabilitate the site in accordance with the conditions imposed on the mining leases(s) associated with the development under the *Mining Act 1992*. The rehabilitation must be generally consistent with the proposed rehabilitation objectives described in the documents listed in condition A2(c) (and shown conceptually in the figure in Appendix 6), and must comply with the objectives in Table 12.

**Table 12: Rehabilitation objectives**

Feature	Objective
All areas of the site affected by the development	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> <li>• Fit for the intended post-mining land use/s</li> <li>• Establish the final landform and post-mining land use/s as soon as practicable after cessation of mining operations</li> <li>• Minimise post-mining environmental impacts</li> </ul>
Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"> <li>• Establish/restore self-sustaining native open woodland ecosystems</li> <li>• Establish local plant community types</li> <li>• Establish: <ul style="list-style-type: none"> <li>– riparian vegetation, within any diverted and/or re-established creek lines and retained water features;</li> <li>– habitat, feed and foraging resources for threatened fauna species; and</li> <li>– vegetation connectivity and wildlife corridors, as far as is reasonable and feasible</li> </ul> </li> </ul>
Areas proposed for agricultural land	<ul style="list-style-type: none"> <li>• Establish/restore grassland areas to support sustainable agricultural activities</li> <li>• Use species found in the local area that are suitable for pasture production</li> <li>• Achieve land and soil capabilities that are equivalent or better than pre-mining</li> <li>• Locate adjacent to surrounding agricultural land, where practicable</li> </ul>
Final Landform	<ul style="list-style-type: none"> <li>• Stable and sustainable for the intended post-mining land use/s</li> <li>• Integrated with surrounding natural landforms and other mine rehabilitated landforms, to the greatest extent practicable</li> <li>• Incorporate macro-relief and micro-relief and drainage features that mimic natural topography and mitigate erosion, to the greatest extent practicable</li> <li>• Maximise surface water drainage to the natural environment, excluding final void catchment (i.e. free draining)</li> <li>• Reduce highwall slopes to a maximum of 18 degrees (excluding slopes below the post-mining standing water level in any final void)</li> <li>• Minimise visual impacts, where practicable</li> </ul>
Final void	<ul style="list-style-type: none"> <li>• Designed as long term groundwater sink to prevent the release of polluting water into the surrounding environment, unless further mine planning and final landform design processes identify a more suitable outcome for the final void (see condition B104)</li> <li>• Optimise the size and depth of any final voids and ensure the final landform is stable and non-polluting</li> <li>• Minimise to the greatest extent practicable: <ul style="list-style-type: none"> <li>– the drainage catchment of final voids;</li> <li>– any high wall instability risk; and</li> <li>– the risk of flood interaction</li> </ul> </li> <li>• Maximise potential for beneficial reuse, where practicable</li> </ul>
Surface infrastructure of the development	<ul style="list-style-type: none"> <li>• To be decommissioned and removed, unless the Resources Regulator agrees otherwise</li> <li>• Structures over the Kamilaroi Highway to be demolished and removed, unless TfNSW agrees otherwise</li> </ul>

<b>Feature</b>	<b>Objective</b>
Rehabilitation materials	<ul style="list-style-type: none"> <li>Materials from areas disturbed under this consent (including topsoils, substrates and seeds) are to be recovered, managed and reused as rehabilitation resources, to the greatest extent practicable</li> <li>Maximise use of biosolids (or similar organic recycled material) to enhance soil quality for revegetation</li> </ul>
Water quality	<ul style="list-style-type: none"> <li>Water retained on the site is fit for the intended post-mining land use/s</li> <li>Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li> </ul>
Community	<ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise adverse socio-economic effects associated with mine closure</li> </ul>

B102. The rehabilitation objectives in Table 12 apply to the entire site, including all landforms constructed under either this consent or previous consents. However, the Applicant is not required to undertake any additional earthmoving works on landforms that have been approved and constructed under previous consents.

### **Progressive Rehabilitation**

B103. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.

**Note:** *This condition does not prevent further disturbance at some later stage of the development of areas that have been rehabilitated.*

### **Rehabilitation Strategy**

B104. The Applicant must prepare a Rehabilitation Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:

- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
- (b) be prepared in consultation with the Resources Regulator, DPIE Water, NSC, BCD and GSC;
- (c) be submitted to the Planning Secretary for approval within six months of the date of commencement of development under this consent;
- (d) build on the Rehabilitation Objectives in Table 12, describe the overall rehabilitation outcomes for the site, and address all aspects of rehabilitation including mine closure, final landform (including any final voids), post-mining land use/s and water management;
- (e) align with strategic rehabilitation and mine closure objectives and address the principles of the *Strategic Framework for Mine Closure* (ANZMEC and MCA, 2000);
- (f) describe how the rehabilitation measures would be integrated with the measures in the Biodiversity Management Plan referred to in condition B63;
- (g) describe how rehabilitation will be integrated with the mine planning process, including a plan to address premature mine closure;
- (h) include details of target vegetation communities and species to be established within the proposed revegetation areas;
- (i) investigate opportunities to refine and improve the final landform outcomes and minimise/eliminate any final voids over time;
- (j) include a risks and opportunities assessment and risk register;
- (k) include a post-mining land use strategy to investigate and facilitate post-mining beneficial land uses for the site (including any final voids), that:
  - (i) align with regional and local strategic land use planning objectives and outcomes;
  - (ii) support a sustainable future for the local community;
  - (iii) utilise existing mining infrastructure, where practicable;
  - (iv) avoid disturbing self-sustaining native ecosystems, where practicable; and
  - (v) includes a description of long-term land management objectives, including bushfire management, weed and feral animal control, water quality and public safety.
- (l) include a stakeholder engagement plan to guide rehabilitation and mine closure planning processes and outcomes;
- (m) investigate ways to minimise adverse socio-economic effects associated with rehabilitation and mine closure;



- (n) include a program to review and refine the final landform and final void outcomes every five years, in consultation with the Resources Regulator and GSC, NSC, to meet the relevant Rehabilitation Objectives in Table 12; and
- (o) include details of the monitoring and management measures to ensure proper storage and protection of top soil.

B105. The Applicant must implement the Rehabilitation Strategy approved by the Planning Secretary.

#### **Rehabilitation Management Plan**

B106. The Applicant must prepare and implement a Rehabilitation Management Plan in accordance with the conditions imposed on the mining lease(s) associated with the project under the *Mining Act 1992*. The plan must:

- (a) be prepared in accordance with the relevant requirements specified under the *Mining Act 1992*;
- (b) be prepared in consultation with the Department, MEG, DPIE Water, BCD, GSC and NSC;
- (c) include a detailed plan for the reinstatement and review of the proposed:
  - (i) ecological rehabilitation and native woodland areas, including a protocol for progressive reviews to demonstrate that the target vegetation communities are being achieved; and
  - (ii) agricultural land rehabilitation;
- (d) include a life of mine rehabilitation and mining schedule which outlines key progressive rehabilitation milestones from the commencement of operations through to decommissioning and mine closure;
- (e) include Rehabilitation Objectives, Rehabilitation Completion Criteria and a Final Landform and Rehabilitation Plan;
- (f) for ecological rehabilitation used for retiring ecosystem credits in Table 10, include all information as required under section 12.2 of the Framework for Biodiversity Assessment of the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014), including triggers for determining whether ecological rehabilitation credits should alternatively be retired as per Condition B60;
- (g) include an overview of the identified risks to achieving successful rehabilitation and the type of rehabilitation strategies to be implemented to address the identified risks;
- (h) describe the measures to be implemented on the site to achieve the Rehabilitation Objectives in Table 12, the requirements of the Rehabilitation Strategy referred to in condition B104;
- (i) include procedures for the reasonable use of interim stabilisation and temporary vegetation strategies to minimise the area exposed for dust generation (see condition B103);
- (j) include a program to monitor, audit and report on the progress against the Rehabilitation Objectives and Rehabilitation Completion Criteria and the Final Landform and Rehabilitation Plan;
- (k) describe further studies, work, research or consultation that will be undertaken to expand the site-specific rehabilitation knowledge base, reduce uncertainty and improve rehabilitation outcomes; and
- (l) outline intervention and adaptive management techniques to ensure rehabilitation remains on a trajectory of achieving the Rehabilitation Objectives, Rehabilitation Completion Criteria and the Final Landform and Rehabilitation Plan as soon as reasonably practical

**Note:**

- The Rehabilitation Management Plan may be combined with a Mining Operations Plan, or similar plan, required under the mining lease granted for the development.

## **SOCIAL**

#### **Social Impact Management Plan**

B107. The Applicant must prepare a Social Impact Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:

- (a) be prepared by a suitably qualified and experienced person/s;
- (b) be prepared in consultation with GSC, NSC, the CCC and the local affected community and other interested stakeholders (to the greatest extent practicable);
- (c) be submitted to the Planning Secretary for approval within six months of the date of commencement of development under this consent;
- (d) identify both positive and negative social impacts resulting from the development and following mine closure, both locally and regionally;
- (e) specify adaptive management and mitigation measures to avoid, minimise, and/or mitigate negative social impacts;
- (f) identify opportunities to secure and enhance positive social impacts from the development, including opportunities to assist in maintaining community services and facilities;

- (g) include a stakeholder engagement plan to guide the evaluation and implementation of social impact management and mitigation measures, and
- (h) include a program to monitor, review and report on the effectiveness of these measures, including updating the plan 3 years prior to mine closure.

B108. The Applicant must implement the Social Impact Management Plan as approved by the Planning Secretary.



## PART C CONSTRUCTION SPECIFIC ENVIRONMENTAL CONDITIONS

### CONSTRUCTION

#### Construction Hours

- C1. Approved construction works for the Project Rail Spur, Kamilaroi Highway Overpass and road realignments must be undertaken between the hours of 7 am to 6 pm, Monday to Sunday and at no time on Public Holidays, unless the Planning Secretary agrees otherwise.
- C2. The following activities may be carried out outside the hours in Condition C1:
- (a) construction work that causes  $L_{Aeq(15min)}$  noise levels that are:
    - (i) No greater than the noise impact criteria in Table 1; and
    - (ii) no more than the noise management levels in Table 2 of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009);
  - (b) delivery of plant, equipment and materials which is required to be delivered outside standard construction hours by Police and/or other authorities for safety reasons;
  - (c) emergency work to avoid loss of life, damage to property and/or environmental harm; or
  - (d) works approved under an Out of Hours Work Protocol in accordance with condition B6.

#### Construction Noise

- C3. The Applicant must ensure that construction noise does not exceed the operational noise criteria in Table 1, except where an alternative temporary limit has been approved by the Planning Secretary for specific works or where the Applicant has an agreement with the owner/s of the relevant residence/land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

#### Kamilaroi Highway Overpass and Project Rail Spur Overpass

- C4. The proposed Kamilaroi Highway Overpass and Project Rail Spur Overpass must both be designed and constructed in accordance with the relevant Austroads guidelines, Australian Standards and TfNSW specifications, in consultation with and to the satisfaction of TfNSW.

**Note:** Additional approval may be required under the Roads Act 1993.

- C5. The Applicant must enter into a Works Authorisation Deed (WAD) prior to undertaking the road works.

**Note:** TfNSW can exercise its powers and functions of the roads authority, to undertake road works in accordance with sections 64 and 71 of the Roads Act 1993, as applicable, for all works under the WAD.

- C6. All road works must be undertaken at full cost to the Applicant and at no cost to the relevant roads authority.

#### Construction Traffic Management Plan

- C7. The Applicant must prepare a Construction Traffic Management Plan for construction of the Kamilaroi Highway Overpass to the satisfaction of TfNSW. This plan must:
- (a) describe the measures to be implemented to minimise traffic and road safety issues and disruption to other road users;
  - (b) include a risk assessment to identify hazards to traffic control, the level of risk posed and control measures to be implemented;
  - (c) include a vehicle movement plan for:
    - (i) managing light, heavy and over-dimensional vehicles during construction works;
    - (ii) transporting construction waste materials; and
    - (iii) restricting construction or transportation hours to avoid road user conflicts; and
  - (d) include a traffic control plan prepared in accordance with *Traffic Control at Work Sites* (RMS, 2018).
- C8. The Applicant must not commence construction works associated with the Kamilaroi Highway Overpass until the Construction Traffic Management Plan is approved by TfNSW

## PART D ADDITIONAL PROCEDURES

### ACQUISITION UPON REQUEST

- D1. Upon receiving a written request for acquisition from the owner of the privately-owned land<sup>a</sup> listed in Table 13, the Applicant must acquire the land in accordance with the procedures in conditions D11 to D18, inclusive.

**Table 13: Land subject to acquisition upon request**

<b>Acquisition Basis</b>	<b>Property ID</b>
Noise	127

<sup>a</sup> The locations of the land referred to in Table 13 is shown in Appendix 1.

### ADDITIONAL MITIGATION UPON REQUEST

- D2. Upon receiving a written request from:
- (a) the owner of any residence on privately-owned land<sup>a</sup> listed in Table 13 (unless the landowner has requested acquisition); or
  - (b) a landowner of the land listed in Table 2; or
  - (c) the owner of any residence where subsequent noise monitoring shows the noise generated by the development is equal to or greater than the relevant voluntary mitigation criteria (except where a negotiated noise agreement is in place);

the Applicant must implement additional mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments* (NSW Government, 2018). They must also be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the relevant noise impacts of the development. The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations.

- D3. If within three months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

### NOTIFICATION OF LANDOWNERS/TENANTS

- D4. Within one month of the date of this consent, the Applicant must:
- (a) notify in writing the owner of:
    - (i) the land listed in Table 13 that they have the right to require the Applicant to acquire their land at any stage during the development;
    - (ii) the residences on the land listed in Table 13 that they are entitled to ask the Applicant to install additional mitigation measures at the residence; and
    - (iii) any privately-owned land within 3 kilometres of the approved open cut mining pit/s that they are entitled to ask the Applicant for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;
  - (b) notify the tenants of any mine-owned land of their rights under this consent; and
  - (c) send a copy of the NSW Health fact sheet entitled *"Mine Dust and You"* (NSW Health, 2017) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the document/s listed in condition A2(c) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criterion in PART B of this consent at any time during the life of the development.
- D5. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:
- (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled *"Mine Dust and You"* (NSW Health, 2017); and
  - (b) advise the prospective tenants of the rights they would have under this consent,
- to the satisfaction of the Planning Secretary.

### NOTIFICATION OF EXCEEDANCES

- D6. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise, blasting or air quality criterion in PART B of this consent, the Applicant must provide the details of the exceedance to any affected landowners tenants and the CCC.



- D7. For any exceedance of any air quality criterion in PART B, the Applicant must also provide to any affected land owners and/or tenants a copy of the NSW Health fact sheet entitled “*Mine Dust and You*” (NSW Health, 2017).

#### **INDEPENDENT REVIEW**

- D8. If a landowner considers the development to be exceeding any relevant air quality, noise or blasting criterion in PART B of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.
- D9. If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.
- D10. If the Planning Secretary is satisfied that an independent review is warranted, within three months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary’s decision, the Applicant must:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
    - (i) consult with the landowner to determine their concerns;
    - (ii) conduct monitoring to determine whether the development is complying with the relevant criterion in PART B of this consent; and
    - (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion;
  - (b) give the Planning Secretary and landowner a copy of the independent review; and
  - (c) comply with any written requests made by the Planning Secretary to implement any findings of the review.

#### **LAND ACQUISITION**

- D11. Within three months of receiving a written request for acquisition from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:
- (a) the current market value of the landowner’s interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:
    - (i) existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - (ii) presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner’s written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise and/or air quality mitigation measures in condition D2;
  - (b) the reasonable costs associated with:
    - (i) relocating within the Gunnedah, Narrabri or Tamworth local government areas, or to any other local government area determined by the Planning Secretary; and
    - (ii) obtaining independent legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.
- D12. If, within two months of the binding written offer being made under condition D11, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.
- D13. Upon receiving a request under condition D12, the Planning Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:
- (a) consider submissions from both parties;
  - (b) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in condition D11;
  - (c) prepare a detailed report setting out the reasons for any determination; and
  - (d) provide a copy of the report to both parties.
- D14. Within 14 days of receiving the independent valuer’s report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer’s determination.
- D15. However, if either party disputes the independent valuer’s determination, then within 14 days of receiving the independent valuer’s report, either party may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer’s determination. Following consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in condition D11, the independent valuer’s report, the detailed report of the party that disputes the independent valuer’s determination and any other relevant submissions.

- D16. Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Planning Secretary's determination.
- D17. If the landowner refuses to accept the Applicant's binding written offer under this condition within six months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Planning Secretary determines otherwise.
- D18. The Applicant must pay all reasonable costs associated with the land acquisition process described in conditions D11 to D17 inclusive, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.



## **PART E ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

### **ENVIRONMENTAL MANAGEMENT**

#### **Environmental Management Strategy**

- E1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:
- (a) be submitted to the Planning Secretary for approval prior to commencing construction under this consent;
  - (b) provide the strategic framework for environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (e) set out the procedures to be implemented to:
    - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - (ii) receive, record, handle and respond to complaints;
    - (iii) resolve any disputes that may arise during the course of the development;
    - (iv) respond to any non-compliance and any incident; and
    - (v) respond to emergencies; and
  - (f) include:
    - (i) references to any strategies, plans and programs approved under the conditions of this consent; and
    - (ii) a clear plan depicting all the sites where monitoring is to be carried out under the conditions of this consent.
- E2. The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.

#### **Adaptive Management**

- E3. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.
- Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:
- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
  - (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
  - (c) implement reasonable remediation measures as directed by the Planning Secretary.

#### **Management Plan Requirements**

- E4. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include where relevant:
- (a) summary of relevant background or baseline data;
  - (b) details of:
    - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - (ii) any relevant limits or performance measures and criteria; and
    - (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - (c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);
  - (d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
  - (e) a program to monitor and report on the:
    - (i) impacts and environmental performance of the development; and
    - (ii) effectiveness of the management measures set out pursuant to paragraph (d);
  - (f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
  - (g) a program to investigate and implement ways to improve the environmental performance of the development over time;
  - (h) a protocol for managing and reporting any:
    - (i) incident, non-compliance or exceedance of any impact assessment criterion or performance measure;

- (ii) complaint; or
- (iii) failure to comply with other statutory requirements;
- (i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and
- (j) a protocol for periodic review of the plan.

**Note:** *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

## REVISION OF STRATEGIES, PLANS AND PROGRAMS

- E5. Within three months of:
- (a) the submission of an incident report under condition E7;
  - (b) the submission of an Annual Review under condition E9;
  - (c) the submission of an Independent Environmental Audit under condition E10; or
  - (d) the modification of the conditions of this consent (unless the conditions require otherwise),
- the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.
- E6. If necessary, to either improve the environmental performance of the development or cater for a modification, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

**Note:** *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*

## REPORTING AND AUDITING

### Incident Notification

- E7. The Applicant must immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must identify the development (including the development application number and name) and set out the location and nature of the incident.

### Non-Compliance Notification

- E8. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

**Note:** *A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*

### Annual Review

- E9. By the end of March each year, after the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
  - (b) report on the progress of biodiversity credits retirements and the associated actual versus proposed surface disturbance for each stage;
  - (c) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:
    - (i) relevant statutory requirements, limits or performance measures/criteria;
    - (ii) requirements of any plan or program required under this consent;
    - (iii) monitoring results of previous years; and
    - (iv) relevant predictions in the document/s listed in condition A2(c);
  - (d) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
  - (e) evaluate and report on:
    - (i) the effectiveness of the noise and air quality management systems; and
    - (ii) compliance with the performance measures, criteria and operating conditions of this consent;
  - (f) identify any trends in the monitoring data over the life of the development;
  - (g) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and



- (h) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.

#### **Independent Environmental Audit**

- E10. Within one year of the date of commencement of development under this consent, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:
- (a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Planning Secretary;
  - (b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Planning Secretary) whose appointment has been endorsed by the Planning Secretary;
  - (c) be carried out in consultation with the relevant agencies and the CCC;
  - (d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals);
  - (e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;
  - (f) recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and
  - (g) be conducted and reported to the satisfaction of the Planning Secretary.
- E11. Within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.

#### **Monitoring and Environmental Audits**

- E12. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

For the purposes of this condition, as set out in the EP&A Act, "monitoring" means monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" means a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.

- E13. Noise, blast and/or air quality monitoring under this consent may be undertaken at suitable representative monitoring locations instead of at privately-owned residences or other locations listed in Part B, providing that these representative monitoring locations are set out in the respective management plan/s.

#### **ACCESS TO INFORMATION**

- E14. Within three months of the date of commencement of development under this consent, until the completion of all rehabilitation required under this consent, the Applicant must:
- (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:
    - (i) the document/s listed in condition A2(c);
    - (ii) all current statutory approvals for the development;
    - (iii) all approved strategies, plans and programs required under the conditions of this consent;
    - (iv) minutes of CCC meetings;
    - (v) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
    - (vi) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
    - (vii) a summary of the current progress of the development;
    - (viii) contact details to enquire about the development or to make a complaint;
    - (ix) a complaints register, updated monthly;
    - (x) the Annual Reviews of the development;
    - (xi) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report; and

- (xii) any other matter required by the Planning Secretary; and
- (b) keep such information up to date, to the satisfaction of the Planning Secretary.



**APPENDIX 1 SCHEDULE OF LAND**  
**TABLE A1 - PROJECT MINING AREA SCHEDULE OF LANDS**

<b>LOT</b>	<b>DP</b>	<b>OWNERSHIP</b>
1	219923	Freehold
2	219923	Freehold
33	553903	Freehold
1	570414	Freehold
2	570414	Freehold
21	754929	Freehold
22	754929	Freehold
23	754929	Freehold
25	754929	Freehold
36	754929	Freehold
37	754929	Freehold
39	754929	Freehold
1	1015797	Freehold
2	1015797	Freehold
1	1018347	Freehold
2	1018347	Freehold
3	1018347	Freehold
5	1018347	Freehold
7	1018347	Freehold
1	1038308	Freehold
2	1038308	Freehold
3	1038308	Freehold
1	1102940	Freehold
2	1102940	Freehold
4	1145592	Freehold
4	1182289	Freehold
5	1182289	Freehold
11	1182290	Freehold

<b>OTHER</b>	
Gunnedah Shire Council, Narrabri Shire Council or Crown	Roads located between or adjacent to the above parcels of land
Crown	Creeks or streams located between or adjacent to the above parcels of land

**TABLE A2 – PROJECT RAIL SPUR ALIGNMENT SCHEDULE OF LANDS**

<b>LOT</b>	<b>DP</b>	<b>OWNERSHIP</b>
15	113293	Freehold
9	754929	Freehold
38	755495	Freehold
64	755495	Freehold
79	755495	Freehold
83	755495	Freehold
85	755495	Freehold
93	755495	Freehold
113	755495	Freehold
120	755495	Freehold
137	755495	Freehold
142	755495	Freehold
217	755495	Freehold
222	755495	Freehold
301	755495	Freehold
304	755495	Freehold
1	929979	Freehold
7004	1029299	Crown
1	1115618	Freehold
1	1160899	Freehold
2	1160899	Freehold
1	1172361	Freehold

<b>OTHER</b>	
State Rail Authority (Crown)	Railway lands located between or adjacent to the above parcels of land
Gunnedah Shire Council, Narrabri Shire Council or Crown	Other roads located between or adjacent to the above parcels of land
Crown	Creeks or streams located between or adjacent to the above parcels of land



**TABLE A3 – PROJECT PRIVATE HAUL ROAD AND KAMILAROI HIGHWAY OVERPASS SCHEDULE OF LANDS**

<b>LOT</b>	<b>DP</b>	<b>OWNERSHIP</b>
678	705086	Freehold
111	755503	Freehold
1	1034511	Freehold
2	1034511	Gunnedah Shire Council
7010	1074926	State of New South Wales
7052	1119794	State of New South Wales

**TABLE A4 – GROUNDWATER BORES AND PIPELINE SCHEDULE OF LANDS**

<b>LOT</b>	<b>DP</b>	<b>OWNERSHIP</b>
2	1131282	Freehold
1	1145592	Freehold
2	1145592	Freehold
3	1145592	Freehold
5	1145592	Freehold

<b>OTHER</b>	
Narrabri Shire Council or Crown	Other roads located between or adjacent to the above parcels of land
Crown	Creeks or streams located between or adjacent to the above parcels of land

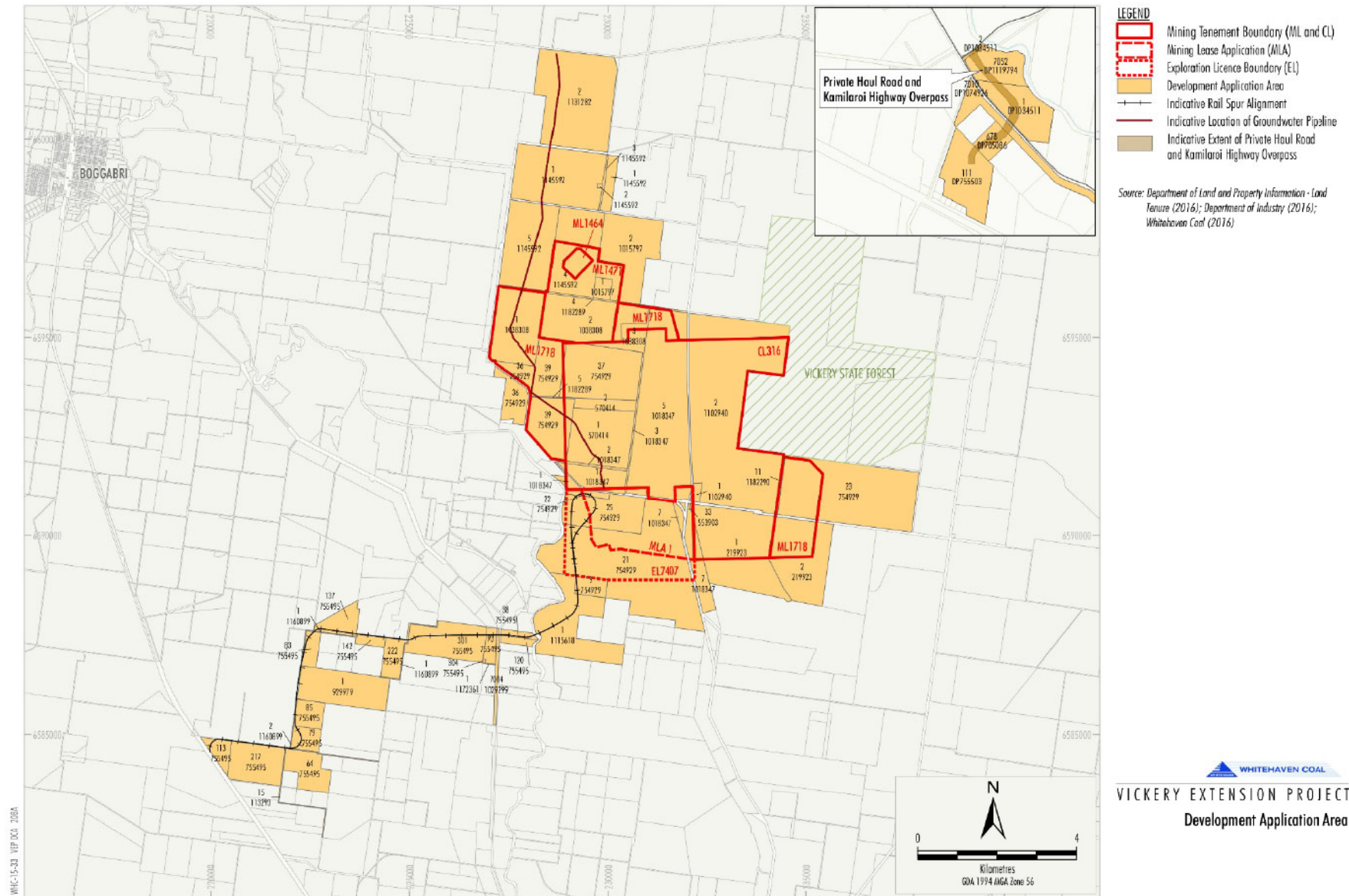


Figure 1: Property Details



## APPENDIX 2 DEVELOPMENT LAYOUT

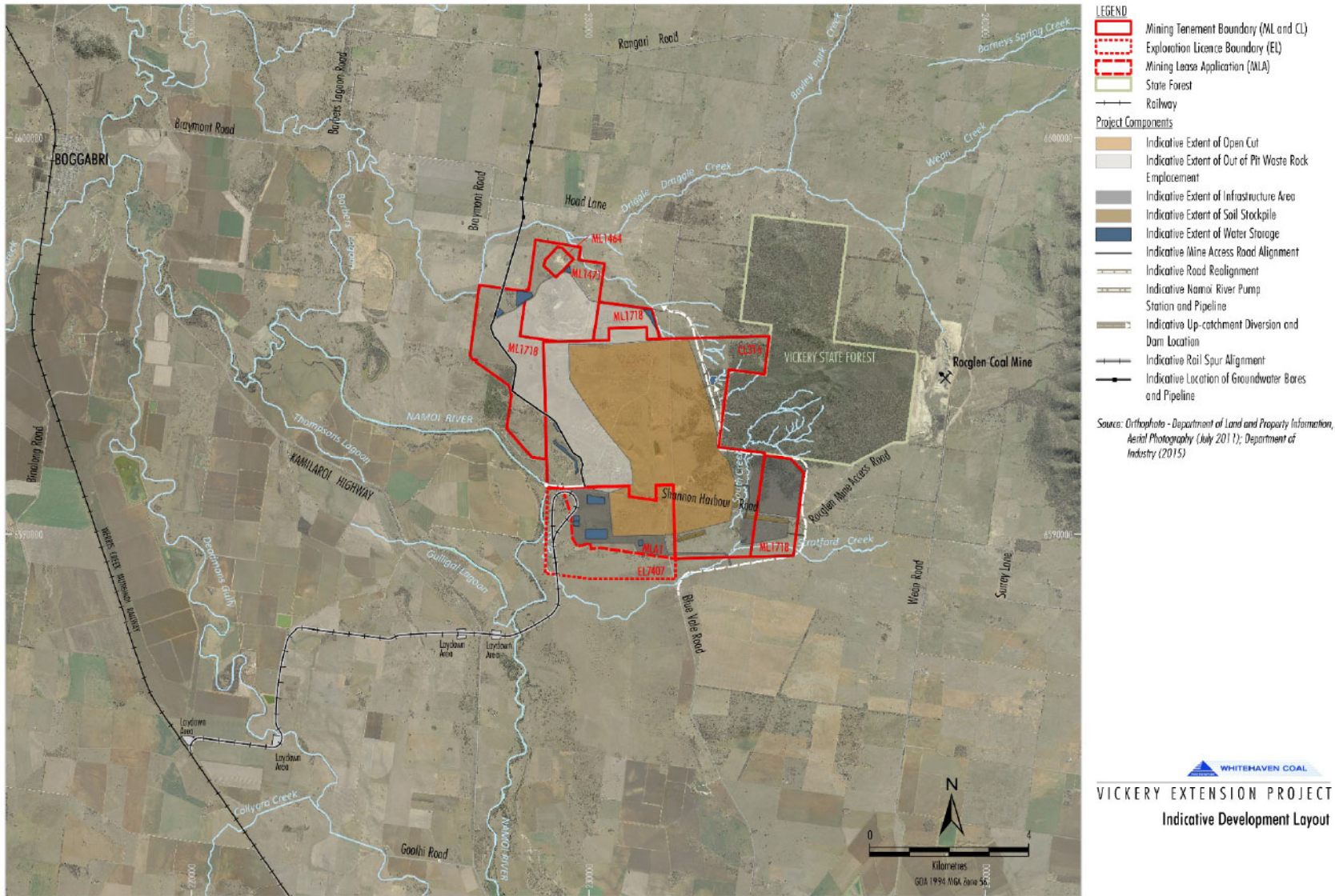
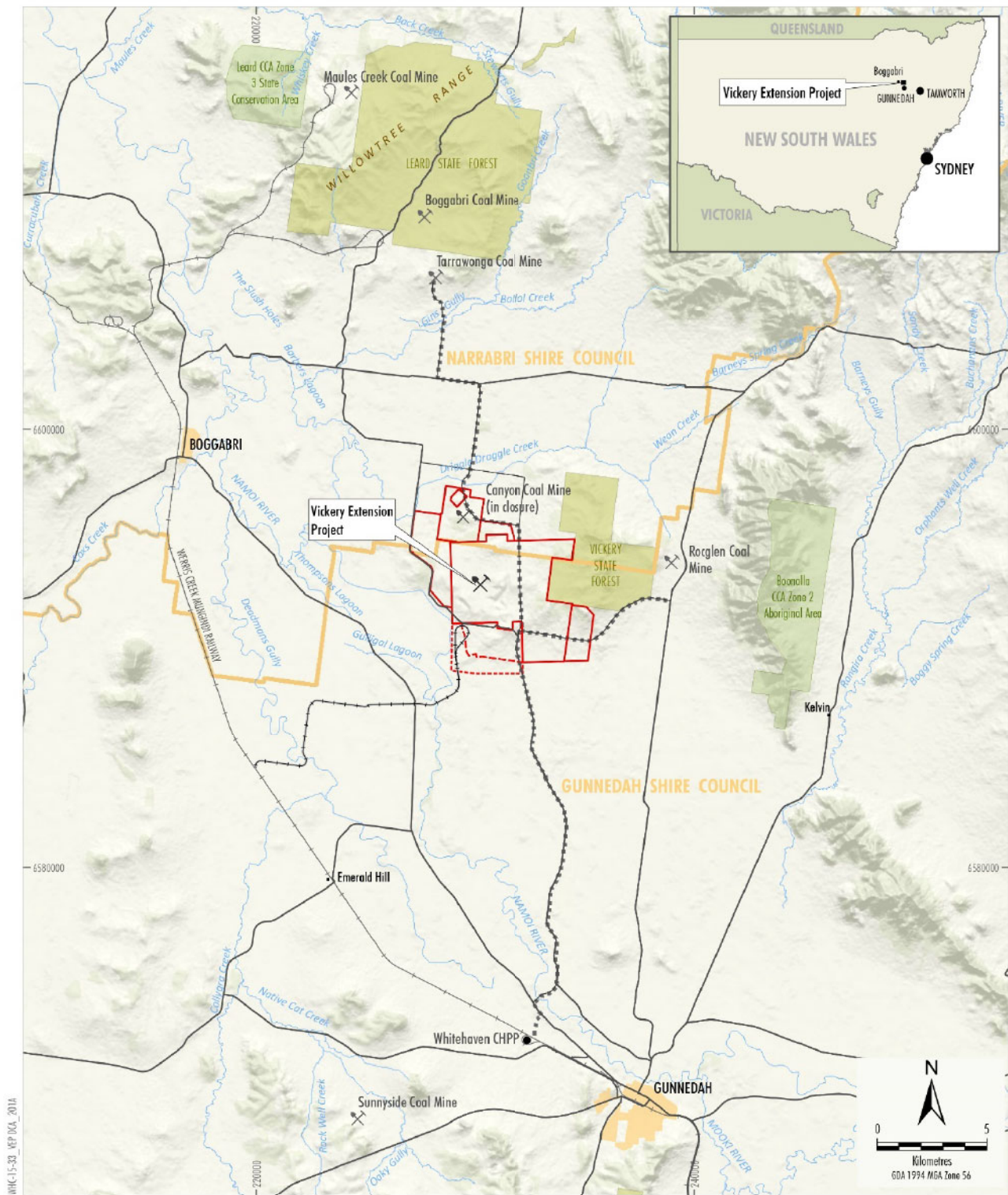


Figure 2: Development Layout





- LEGEND**
- Mining Tenement Boundary (ML and CL)
  - Exploration Licence Boundary (EL)
  - Mining Lease Application (MLA)
  - Local Government Boundary
  - State Forest
  - State Conservation Area, Aboriginal Area
  - Major Roads
  - Railway
  - Approved Haulage Route
  - Indicative Project Rail Spur

Source: IPMA - Topographic Base (2010); NSW Department of Industry (2015)

**WHITEHAVEN COAL**  
**VICKERY EXTENSION PROJECT**  
**Project Location**  
**and Approved Haulage Route**

**Figure 3: Approved Haulage Route**



### APPENDIX 3 RECEIVER LOCATIONS

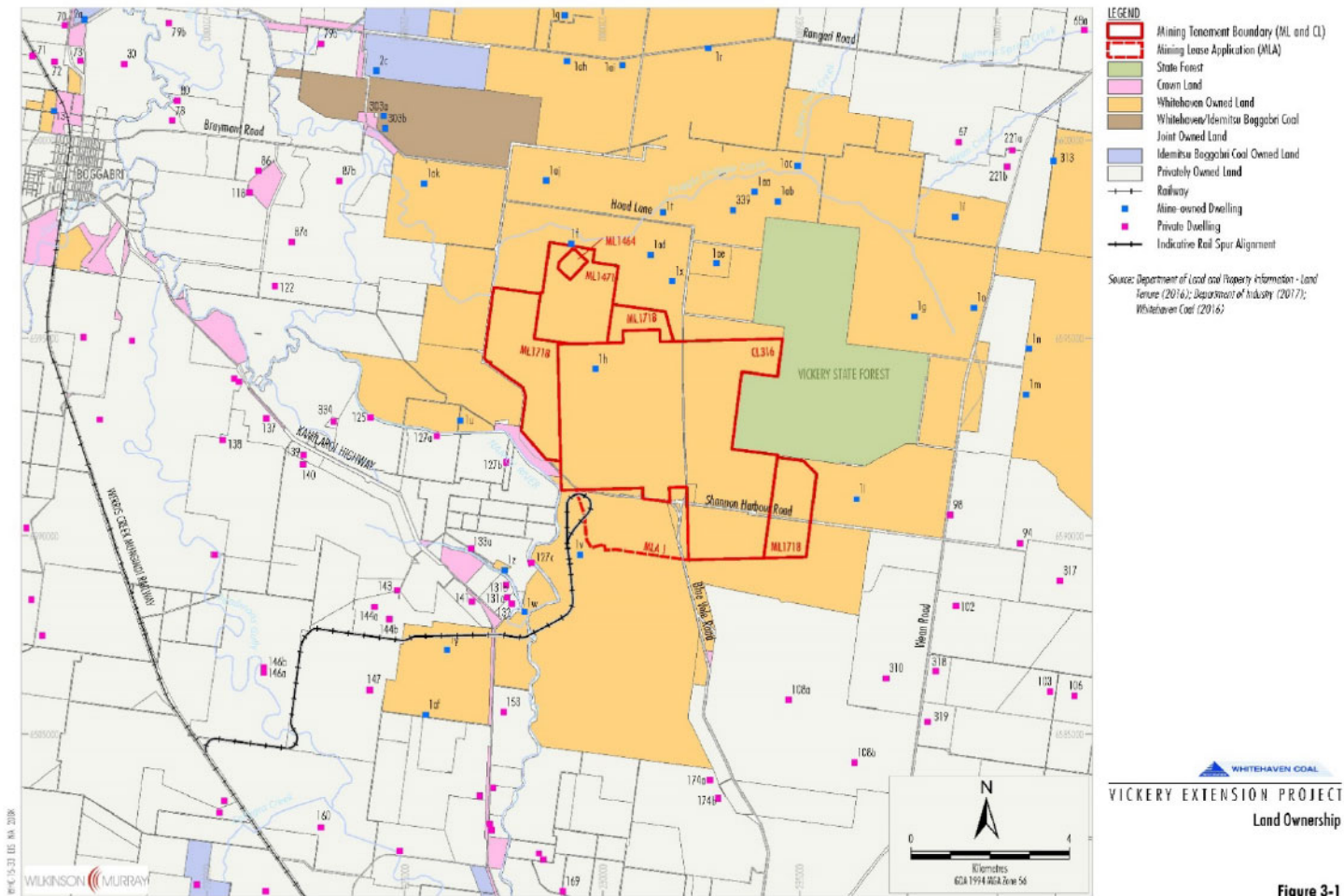
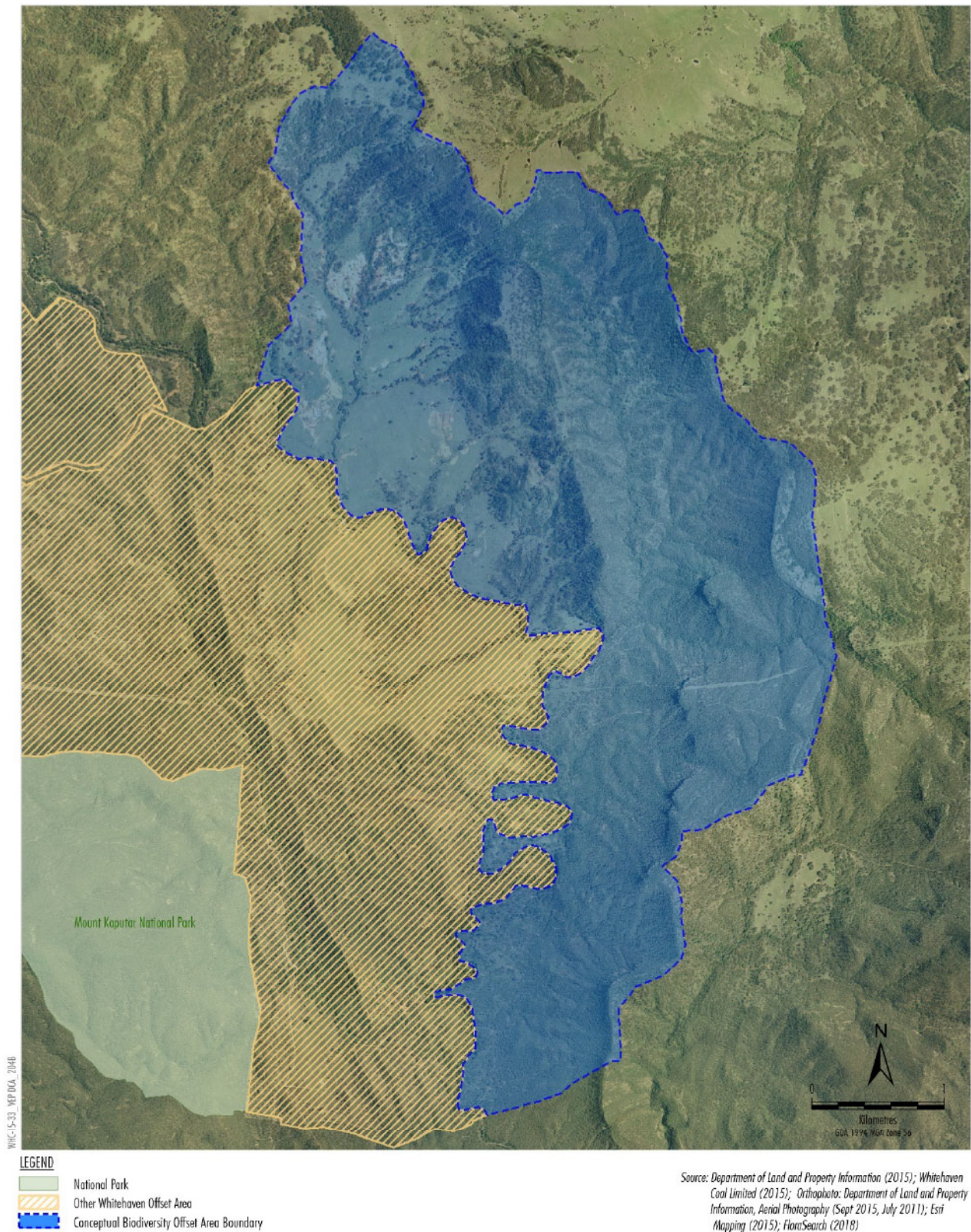


Figure 4: Receiver locations



## APPENDIX 4 BIODIVERSITY OFFSETS



WHITEHAVEN COAL  
VICKERY EXTENSION PROJECT  
Willeroi East Offset Area

Figure 5: Willeroi East Offset Area



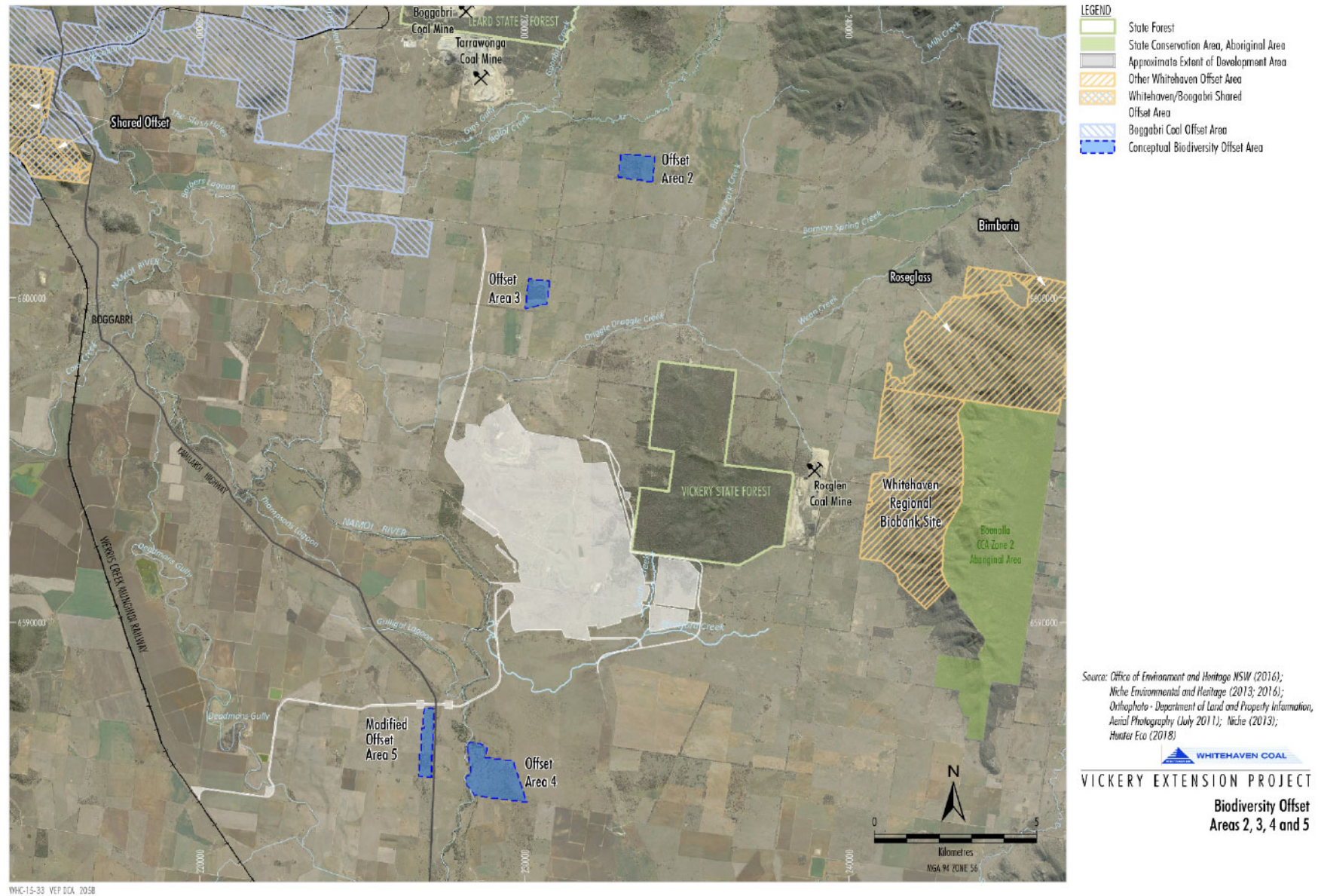


Figure 6: Biodiversity Offset Strategy



## APPENDIX 5 HERITAGE SITES

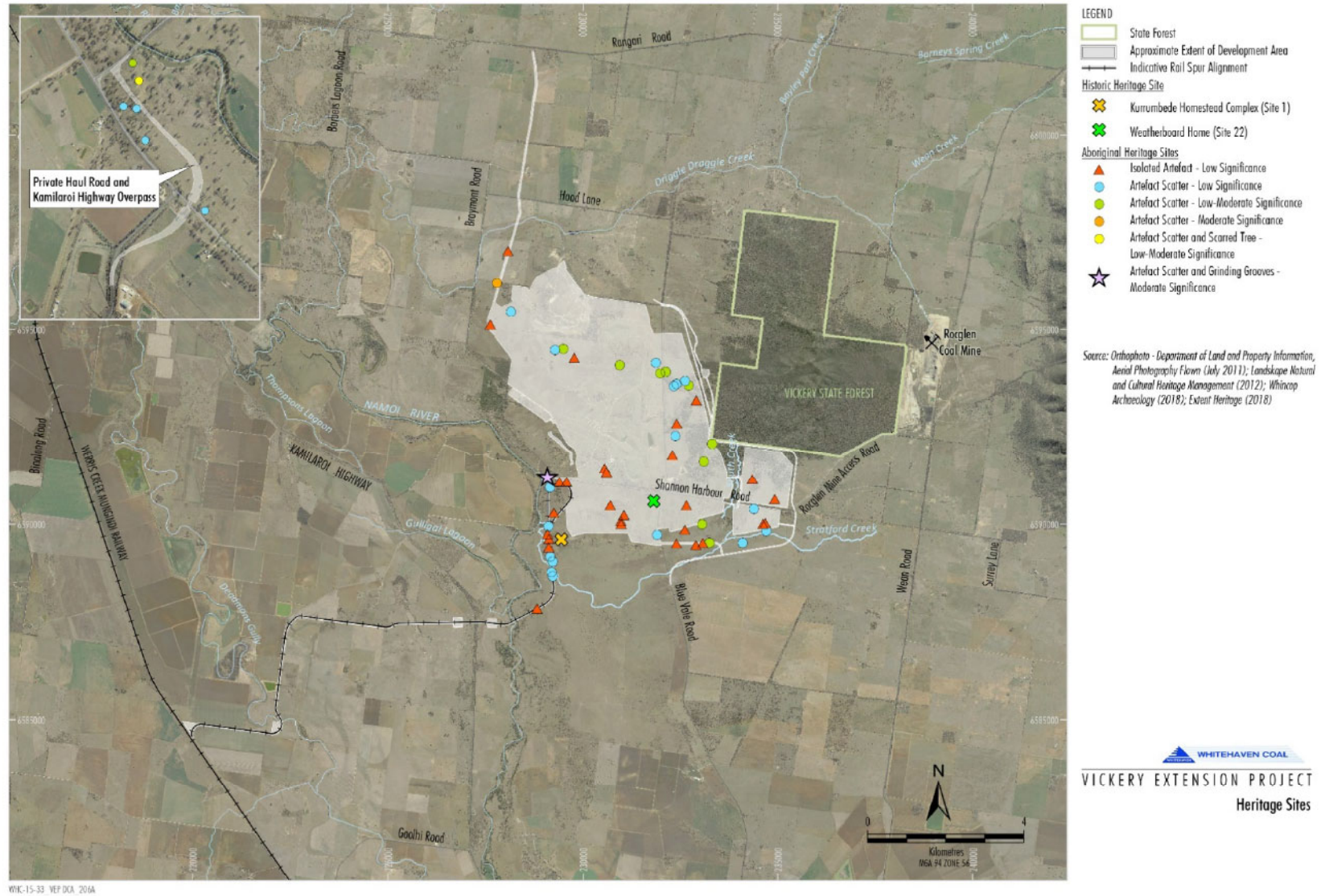


Figure 7: Heritage sites



## APPENDIX 6 REHABILITATION PLAN

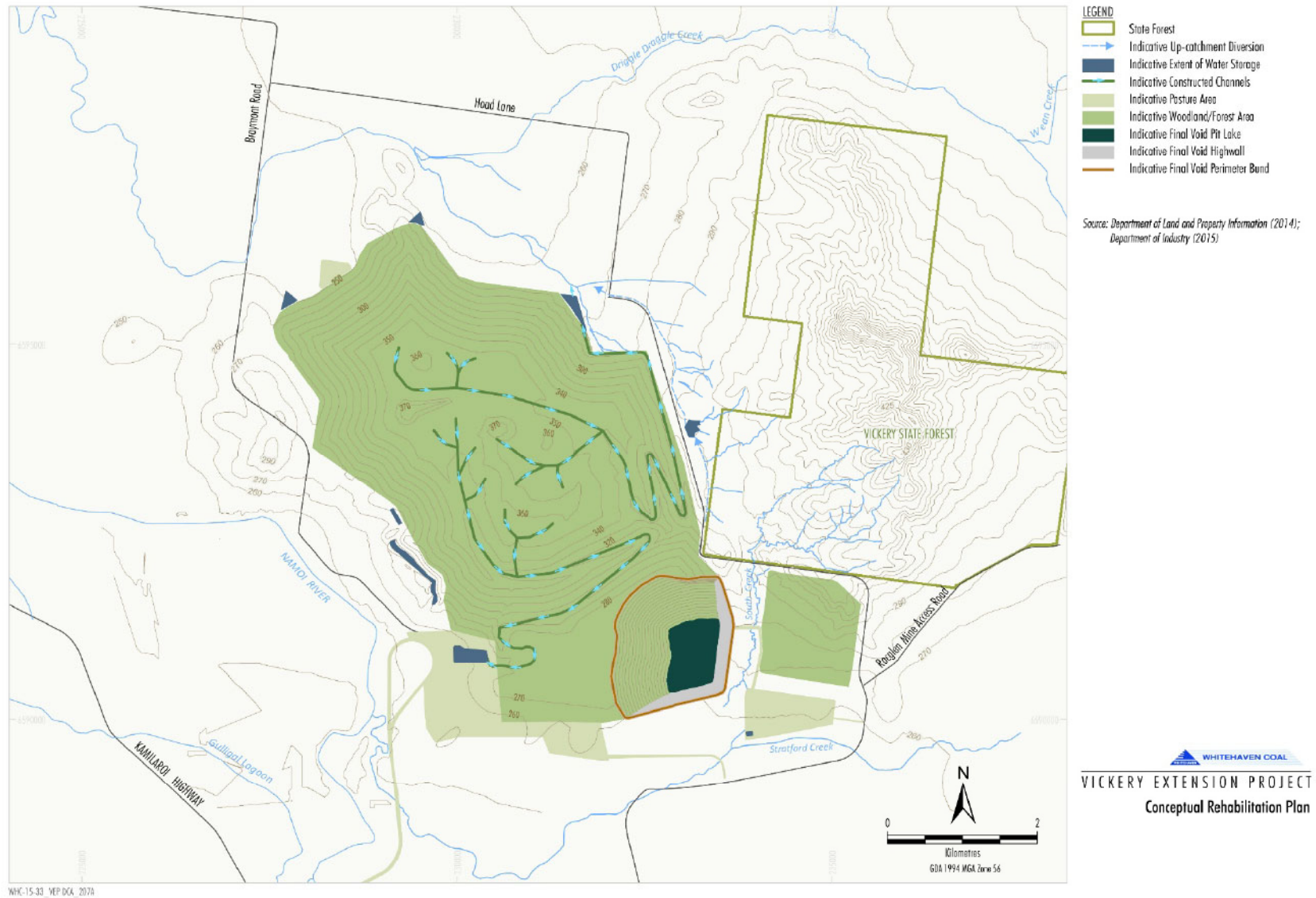


Figure 8: Conceptual Rehabilitation Plan

## APPENDIX 7 GENERAL TERMS OF APPLICANT'S VPA OFFER

### NARRABRI SHIRE COUNCIL

<i>Applicant's Contribution</i>	<i>Intended Use</i>	<i>Payment Details</i>
\$500,000	Contribution to Upgrade of Boggabri Pool	On commencement of construction of the intended use, recruitment of role or other agreed timing
\$500,000	Contribution to Community Meeting Space in Boggabri	
\$850,000	Contribution to Retirement Units in Boggabri	
\$500,000	Boggabri Merton Street Streetscape Project	
\$750,000	Contribution to Boggabri Showground Improvements	
\$100,000	Contribution to Community Development Role for Boggabri	

### GUNNEDAH SHIRE COUNCIL

<i>Applicant's Contribution</i>	<i>Intended Use</i>	<i>Payment Details</i>
\$500,000	Funding community initiatives and projects	On granting of development consent <sup>1</sup>
\$500,000	Funding community initiatives and projects	On the date of commencement of development under this consent
70% of \$0.065 per tonne of Product Coal produced during a financial year	Funding community initiatives and projects	Not more than three (3) months after the end of the financial year for the mine life

<sup>1</sup> This contribution is refundable if this consent is revoked, for example, if there is successful legal challenge of the determination of the consent.



# Attachment 2

EPBC

2016/7649

Approved 19  
September  
2021





## APPROVAL

### Vickery Extension Project, Gunnedah, NSW (EPBC 2016/7649)

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

<b>Person to whom the approval is granted (approval holder)</b>	Vickery Coal Pty Ltd
<b>ACN or ABN of approval holder</b>	ACN: 626 224 495
<b>Action</b>	The extension of the open cut mining operations at the Vickery Coal Mine and related surface infrastructure and activities, 25 km north of Gunnedah, NSW (see EPBC Act referral 2016/7649 and the variations approved on 17 February 2017 and 17 July 2018).

#### Approval decision

My decision on whether or not to approve the taking of the action for the purposes of each controlling provision for the action is 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 2051

#### Decision-maker

<b>Name and position</b>	The Hon Sussan Ley MP Minister for the Environment
<b>Signature</b>	
<b>Date of decision</b>	15 <sup>th</sup> September 2021



## Conditions of approval

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

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## ANNEXURE A – CONDITIONS OF APPROVAL

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### Part A – Conditions specific to the action

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#### 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 B39 to B54 and B101 to B106.
2. The **approval holder** must ensure that there is no **adverse effect** on the **function** of a **water resource** as a result of the **action**.
3. The **approval holder** must notify the **Department** in writing, within **2 business days**, if an application to modify **State development consent** conditions B39 – B54 and B101-B106 is made.
4. The **approval holder** must notify the **Department** in writing, within **10 business days**, where **State development consent** conditions B39 – B54 and B101-B106 have been modified.
5. The **approval holder** must include the following information in the Water Management Plan required by **State development consent** condition B53:
  - a. management and mitigation strategies to minimise potential **impacts** to the **EPBC Act** listed Murray Cod (*Maccullochella peelii*).
  - b. details of any chemical dust suppressants used. These details must include the chemicals proposed for use, typical application rates, and an assessment of the likelihood that the chemicals will enter the environment (e.g. soil, groundwater or surface water) and the potential persistence and toxicity to **protected matters** of these chemicals or their breakdown products. Furthermore, if data on chronic toxicity to aquatic organisms is not available in respect of any chemical proposed for use, the **approval holder** must include the results of direct toxicity assessments undertaken in accordance with the *Australian and New Zealand guidelines for fresh and marine water quality, 2018* or any subsequent revision.
6. The **approval holder** must provide the **Department** with the final version of the Water Management Plan required by condition B53 of the **State development consent** within **10 business days** of its approval by the NSW Planning Secretary.
7. The **approval holder** must notify the **Department** within **2 business days** of any proposed changes to the final version of the Water Management Plan. If the NSW Planning Secretary approves a revised version of the Water Management Plan, the **approval holder** must provide the **Department** with the approved revised Water Management Plan within **10 business days** of its approval by the NSW Planning Secretary.
8. In addition to the Groundwater Management Plan monitoring requirements specified in condition B53 of the **State development consent**, the **approval holder** must:
  - a. Establish and maintain a network of groundwater monitoring bores designed to detect changes in groundwater levels and include bores that are co-located or paired with surface water monitoring sites to allow monitoring and analysis of groundwater-surface water interactions. These monitoring bores must be installed prior to the commencement of **mining operations**.

- b. Monitor groundwater levels in each bore (required under condition 8.a) at least once every 3 months, starting within one week of the commencement of **mining operations** for the life of this approval.
  - c. Publish on the website all groundwater monitoring data from the bore network, updated at least once every 3 months to include the most recent readings available and maintain the data on the website for the life of this approval. The monitoring data must include hydrographs for the bore network and explain what the data means in relation to the groundwater **performance measures** specified in the **State development consent**.
9. The **approval holder** must submit performance criteria and **limits**, relevant to groundwater extraction impacts for the alluvial aquifer, for the **Minister's** approval. The submission of the **performance criteria** and **limits** must be accompanied by evidence-based justification of how they were derived from the results of monitoring, consider groundwater-surface water connectivity, and are suitable to demonstrate condition 2 is being achieved.
  10. The **approval holder** must not commence groundwater extraction from the water supply borefield until the **performance criteria** and **limits** have been approved by the **Minister** in writing.
  11. If, at any time during the period for which this approval has effect, the **approval holder** detects an exceedance of any approved limit required under condition 9 the **approval holder** must notify the **Department** of the exceedance within **2 business days** of detecting the exceedance.
  12. If, at any time during the period for which this approval has effect, the **approval holder** detects an exceedance of an approved **limit** required under condition 9, the **approval holder** must cease groundwater extraction from the **water supply bore field** within **2 business days**.
  13. If the **approval holder** has been required to cease groundwater extraction pursuant to condition 12, the **approval holder** must:
    - a. provide information including monitoring data that identifies the likely cause of the exceedance of the approved **limit**;
    - b. consider the effect of the current condition of the **water resource** on the utility of the **water resource** for **associated users**; and
    - c. if the likely cause is identified as a component of the action, propose measures to mitigate and manage any **impacts** to any **associated users**, ensuring that the utility of the **water resource** for **associated users** is not effected.
  14. The **approval holder** must not recommence groundwater extraction until the information required in condition 13 has been approved by the **Minister** in writing. The **approval holder** must implement the approved mitigation and management measures.

#### Listed Threatened Species

The objective of conditions 15 to 22 is to minimise the impacts and compensate for residual impacts of the **action** on **EPBC Act listed threatened species**.

15. Within the area designated 'Approximate Extent of Vickery Extension Project (EPBC 2016-7649) footprint' at **Attachment A**, the **approval holder** must not **clear** more than:
  - a. 75.2 hectares of Regent Honeyeater (*Anthochaera phrygia*) habitat,
  - b. 104.7 hectares of Swift Parrot (*Lathamus discolor*) habitat,
  - c. 80.9 hectares of Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and the Australian Capital Territory) habitat.

**Note:** Habitat for the Regent Honeyeater, Swift Parrot and Koala is based on the NSW plant community types (PCTs) **Attachment B and C**.



16. The **approval holder** must comply with the **State development consent** conditions B56 - B67, and B101 - B106 (to the extent these conditions relate to **EPBC Act** listed **threatened species**).
17. The **approval holder** must notify the Department in writing, within 2 **business days** if they apply to modify **State development consent** conditions B56 – B67 and B101-B106.
18. The **approval holder** must notify the Department in writing, within 10 **business days**, where **State development consent** conditions B56 – B67 and B101-B106 have been modified.
19. To compensate for **impacts** on threatened species and communities listed in condition 15, the **approval holder** must comply with **State development consent** conditions B56 and B57 and must retire the biodiversity credits specified in table 10 and 11 of **State development consent** conditions B58 and B59.
20. The approval holder must publish a credit retirement report within 10 **business days** of retiring the credits on the **approval holder's** website.
21. The **approval holder** must provide the Minister with a statement, prior to the **commencement of the action** validating that the approved land based offsets specified in Table 9 of the **State development consent** contain at least 293.9 ha of potential Regent Honeyeater (*Anthochaera phrygia*) habitat (the equivalent of 2087 species credits) and 112 ha of potential Koala (*Phascolarctos cinereus*) habitat (the equivalent of 795 species credits). The statement must be endorsed by an accredited assessor under the *NSW Biodiversity Conservation Act 2016* and must be published on the **approval holder's** website.

**Note:** The equivalent credits in condition 21 were calculated in accordance with the Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEH, 2014).

22. If the **Minister** is not satisfied that the approved land based offsets specified in Table 9 of the **State development consent** contain the habitat specified in condition 21, the **approval holder** may be required by the Minister to retire specified biodiversity credits under the *NSW Biodiversity Conservation Act 2016* within the timeframes specified in condition B58 of the **State development consent**.

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## **Part B – Standard administrative conditions**

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### **Notification of date of commencement of the action**

23. 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.
24. If the **commencement of the action** does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister.

### **Compliance records**

25. The approval holder must maintain accurate and complete **compliance records**.
26. 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**

27. The **approval holder** must:

- a. submit **plans** electronically to the **Department**;
- b. unless otherwise agreed to in writing by the **Minister**:
  - i. publish each **plan** on the website within 20 **business days** of the date the plan is approved by the **Minister** or of the date a revised action management plan is submitted to the **Minister** or the **Department**, unless otherwise agreed to in writing by the **Minister**;
  - ii. publish the Water Management **Plan** on the **website** within 20 **business days** of the date the **plan** is approved by the NSW Planning Secretary;
  - iii. exclude or redact **sensitive ecological data** from **plans** that are to be published on the **website** or provided to a member of the public; and
  - iv. keep **plans** published on the **website** until the end date of this approval.

### **Annual compliance reporting**

28. The **approval holder** must prepare a **compliance report** addressing compliance with each of the conditions of this approval, including implementation of any management **plans** and strategies required under the **State development consent** conditions that are referred to in this approval, **at the end of March** every year, **and covering compliance for the previous calendar year** or otherwise in accordance with another annual date that has been agreed to in writing by the **Minister**. The **approval holder** must:

- a. publish each **compliance report** on the **website** within 20 **business days** following the end of March each year;
- b. notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within 5 **business days** of the date of publication;
- c. keep all **compliance reports** publicly available on the **website** until this approval expires;
- d. exclude or redact **sensitive ecological data** from **compliance reports** prior to publishing each **compliance report** 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.

**Note:** **Compliance reports** may be published on the **Department's** website.

### **Reporting non-compliance**

29. The **approval holder** must notify the **Department** in writing of any: **incident**, or non-compliance with the conditions. 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 is or may be 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.
- 30. The **approval holder** must provide to the **Department** the details of any **incident** or non-compliance with the conditions 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**

- 31. The **approval holder** must ensure that **independent audits** of compliance with the conditions are conducted as requested in writing by the **Minister**.
- 32. 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.
- 33. 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**

- 34. The **approval holder** must comply with condition A7<sup>1</sup> in Schedule 2 of the **State development consent**.
- 35. Within 20 business days after the **completion of the action**, the **approval holder** must notify the **Department** in writing and provide **completion data**.

#### **Changes to State development consent**

- 36. 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 2 **business days** of formally proposing a change and within 5 **business days** of becoming aware of any proposed change.
- 37. 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.

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<sup>1</sup> Condition A7 in Schedule 2 states that mining operations may be carried out on the site until 12 August 2045.

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## Part C - Definitions

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

**Action** means the Vickery Extension Project, Gunnedah, NSW (EPBC 2016/7649) as described in the NSW Assessment Report, the referral under the EPBC Act and the two variation requests dated 17 February 2017 and 17 July 2018 respectively.

**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** required under condition 9 of this approval.

**Approval holder** means the person to whom the approval is granted as identified on the approval notice for EPBC 2016/7649, or to whom the approval is transferred under section 145B of the **EPBC Act**, or a person who may take the **action** in accordance with section 133(2A) of the **EPBC Act**.

**Approved disturbance area** means the area defined as the "Approved disturbance area" in Schedule 1 of the **State development consent**.

**Aquatic GDE** 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 documents listed in condition A2(c) of the **State development consent**.

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

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

**Clear/ing** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation within the **approved disturbance area**.

**Commencement of the action** means the first instance of any specified activity associated with the action including **clearing** and **construction**. **Commencement of the action** does not include:

- i. pre-clearance surveys or monitoring programs;
- ii. installation of signage and/or temporary fencing to prevent unapproved use of the project area;
- iii. protection of environmental and property assets from fire, weeds and pests, including erection of temporary fencing, and use of existing surface access tracks;
- iv. upgrades, diversions, removal or installation of utilities;
- v. installation of temporary site facilities (including temporary roads, offices, toilets and laydown facilities) for persons undertaking pre-commencement activities so long as these are located where they have no impact on the **protected matters**;
- vi. geotechnical investigations, site surveying activities and geological exploration drilling.



**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**.

**Completion of the action** means all specified activities associated with the **action** have permanently ceased.

**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** means written reports:

- i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
- ii. consistent with the **Department's Annual Compliance Report Guidelines** (2014);
- iii. include a **shapefile** of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and
- iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

**Construction** means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the activities that do not constitute **commencement of the action**.

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

**Environmental offsets policy** means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (October 2012)*, or subsequent official revised version, including the Offsets Assessment Guide, available at:

<http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>

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

**EPBC Act listed threatened species and communities:** Regent Honeyeater (*Anthochaera phrygia*), Swift Parrot (*Lathamus discolor*) and Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and the Australian Capital Territory).

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

**Impact** (verb) means to cause any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the **action**. **Impact/s** (noun) means 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(s)** other than as authorised by this approval.

**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).

**Limit/s** means a specified numerical value for the **performance criteria**.

**Listed threatened species:** Regent Honeyeater (*Anthochaera phrygia*), Swift Parrot (*Lathamus discolor*) and Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and the Australian Capital Territory).

**Mining operations** means the carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden and reject material.

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

**NSW performance criteria** means as specified in the approved Water Management Plan required under condition B53 of the **State development consent**.

**Performance criteria** means specific parameters, associated with and relevant to the **function** of a **water resource** that will be monitored to demonstrate that the outcome of no **adverse effect** is being achieved, measured at a specific time and place.

**Performance measure** means as specified in Table 8 of the **State development consent** and as defined in the Water Management **Plan** approved by the NSW Government.

**Plan(s)** means any of the documents required to be prepared, approved by the **Minister**, implemented by the approval holder and/or published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

**Protected matter** means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

**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*.

**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.

**State development consent** means the Development Consent issued by the Independent Planning Commission of New South Wales for application number SSD-7480 dated 12 August 2020.

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

**Suitably qualified expert** 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 supply bore field** means the water supply bore field identified in Attachment E.

**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.

**Wetland/s** means land intermittently or permanently inundated with water that is usually slow moving or stationary, shallow, can be fresh, brackish or saline, and where the inundation affects the plant and animal communities present and the type and productivity of soil.



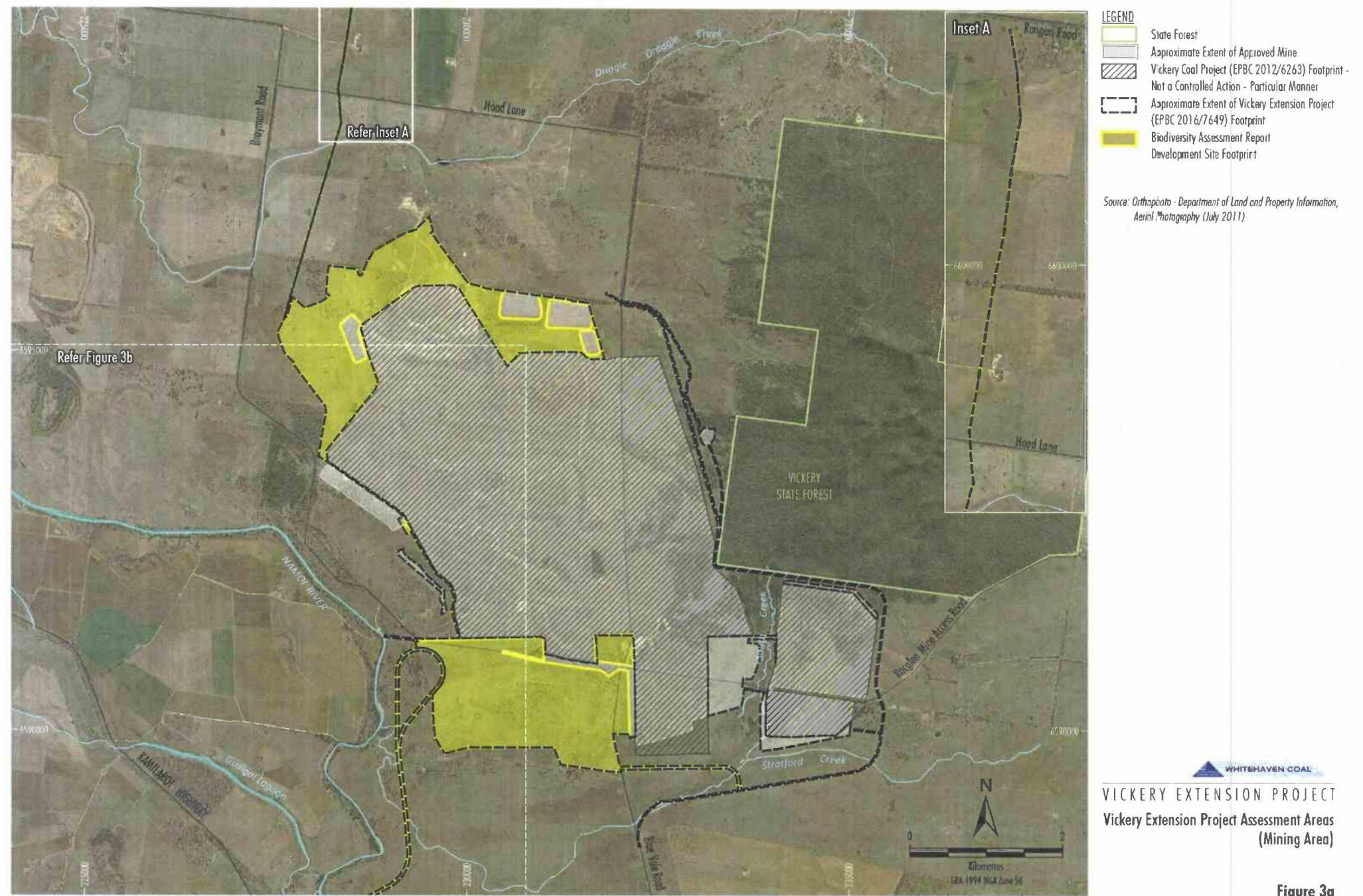


Figure 3a





Figure 3b



# Attachment B - Plant Community Types within the action area (project mining area).



- LEGEND**
- State Forest
  - Study Area
- Vegetation Communities**
- Semi-arid Woodlands (Grassy Sub-formation)**
    - 1 Weeping Myall Woodland (NA219)\*
    - 2 Poplar Box Woodland on Alluvial Clay Soils (NA185)
    - 2a Poplar Box Woodland on Alluvial Clay Soils (Secondary/derived grassland) (NA185)
  - Dry Sclerophyll Forests (Shrub/Grass Sub-formation)**
    - 3 Pilliga Box – Poplar Box Shrubby Woodland (NA324)
    - 3a Pilliga Box – Poplar Box Shrubby Woodland (Secondary/derived grassland) (NA324)
    - 4 White Box – Silver-leaved Ironbark Shrubby Open Forest (NA349)
    - 4a White Box – Silver-leaved Ironbark Shrubby Open Forest (Secondary/derived grassland) (NA349)
  - Dry Sclerophyll Forests (Shrubby Sub-formation)**
    - 5 Narrow-leaved Ironbark – White Box Shrubby Forest (NA311)
    - 5a Narrow-leaved Ironbark – White Box Shrubby Forest (Secondary/derived grassland) (NA311)
  - Freshwater Wetlands**
    - 7 Mixed Marsh Sedgeland (NA201)
  - Forested Wetlands**
    - 8 River Red Gum Riparian Tall Woodland (NA193)
    - 8a River Red Gum Riparian Tall Woodland (Secondary/derived grassland) (NA193)
  - Cleared Land**
    - 9 Exotic Dominant Grasslands
  - DL Disturbed Land**
  - \* Listed as the Weeping Myall Woodland EEC

Note: Vegetation community 6 is not present in this figure.

Source: Orthophoto - Department of Land and Property Information, Aerial Photography (July 2011)

**WHITEHAVEN COAL**  
VICKERY EXTENSION PROJECT  
Vegetation Communities  
Project Mining Area

**Figure 4a**





**LEGEND**

- State Forest
- Study Area

**Vegetation Communities**

Semi-arid Woodlands (Grassy Sub-formation)

- 1 Weeping Myall Woodland (NA219)\*
- 2 Poplar Box Woodland on Alluvial Clay Soils (NA185)
- 2a Poplar Box Woodland on Alluvial Clay Soils (Secondary/derived grassland) (NA185)

Dry Sclerophyll Forests (Shrub/Grass Sub-formation)

- 3 Pilliga Box – Poplar Box Shrubby Woodland (NA324)
- 3a Pilliga Box – Poplar Box Shrubby Woodland (Secondary/derived grassland) (NA324)

Dry Sclerophyll Forests (Shrub/Grass Sub-formation)

- 4 White Box – Silver-leaved Ironbark Shrubby Open Forest (NA349)
- 4a White Box – Silver-leaved Ironbark Shrubby Open Forest (Secondary/derived grassland) (NA349)

Forested Wetlands

- 8 River Red Gum Riparian Tall Woodland (NA193)
- 8a River Red Gum Riparian Tall Woodland (Secondary/derived grassland) (NA193)

Cleared Land

- DL Disturbed Land

\* Listed as the Weeping Myall Woodland EEC

\* Provisional vegetation mapping west of the Kamilaroi Highway based on airphoto interpretation

Note: Vegetation communities 1, 5, 6 and 7 are not present on this figure

Source: Orthophoto - Department of Land and Property Information, Aerial Photography (July 2011)

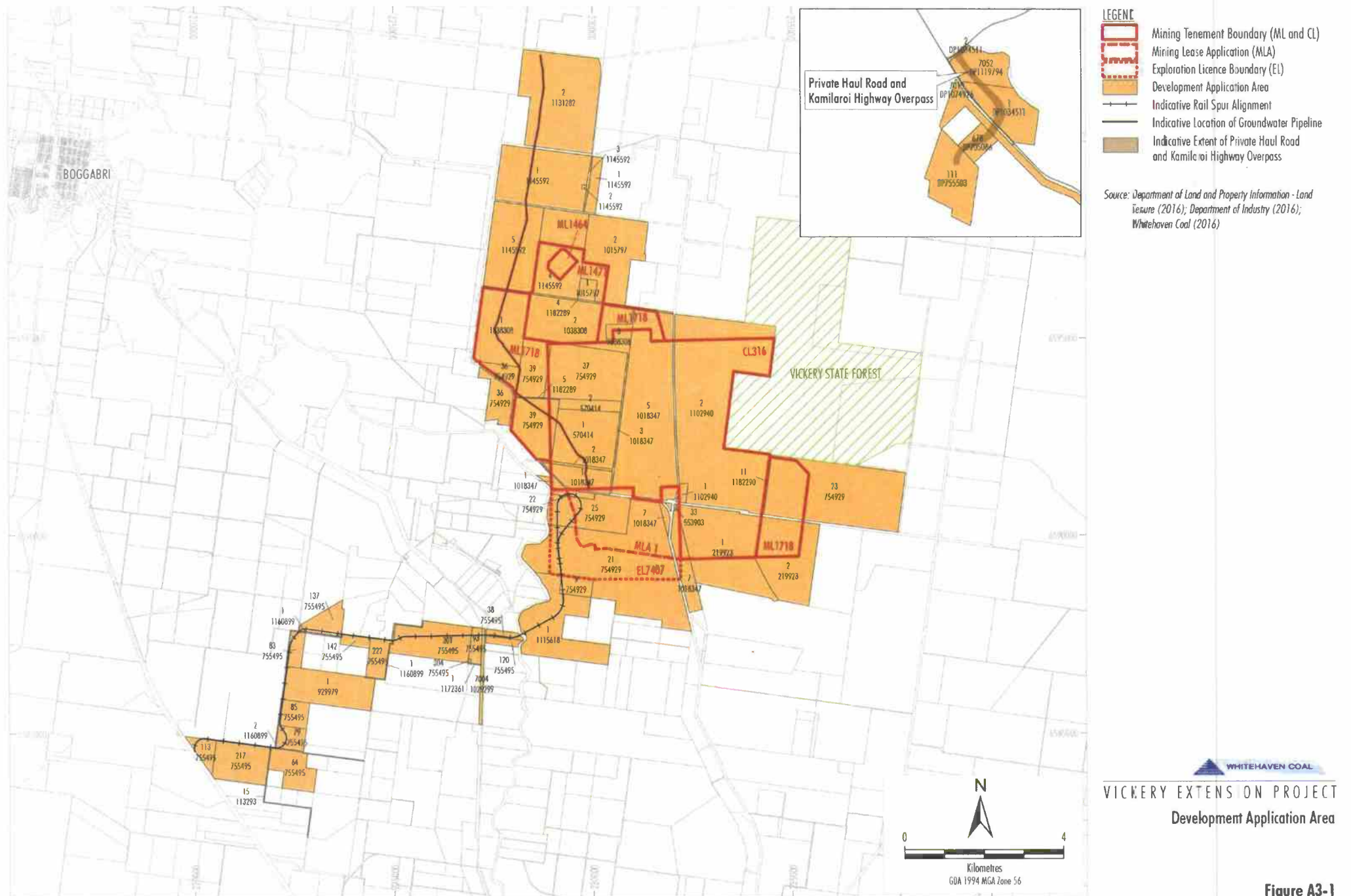


VICKERY EXTENSION PROJECT  
Vegetation Communities  
Indicative Rail Spur Investigation Corridor

**Figure 4b**



# Attachment D - Development Application Area State development consent



 WHITEHAVEN COAL

VICKERY EXTENSION PROJECT

Indicative Rail Spur Alignment and  
Groundwater Bore Locations



# Attachment 3

**Biodiversity  
Credits BBAM  
to BAM  
reasonable  
equivalence  
conversion**



## Statement of assessment of reasonable equivalence of biodiversity credits

A delegate of the Environment Agency Head of the Department of Planning and Environment has determined that the number of biodiversity credits required to be retired under the *Threatened Species Conservation Act 1995 (TSC Act)* as part of the development consent listed in Part 1, are reasonably equivalent to the number and class of biodiversity credits under the *Biodiversity Conservation Act 2016 (BC Act)* set out in Part 2.

This document outlines that determination, made in accordance with clause 22(3) of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*.

### Part 1 Existing statutory obligation to retire credits

<b>Request made by:</b>	Vickery Coal Pty Ltd (ABN 68 124 425 396)
<b>Date request received</b>	27 June 2022
<b>Development Consent reference</b>	SSD7480
<b>Development name</b>	Vickery Extension Project

Existing statutory obligation reference	Biodiversity credit name (Plant Community Type name and ID, or threatened species name)	IBRA sub region	Number of credits
SSD 7480	Narrow-leaved Ironbark - Black Cypress Pine - White Box shrubby woodland in sedimentary hills of the Gunnedah region, Brigalow Belt South Bioregion (NA311)	Liverpool Plains (Part B)	4025 or 3156 <sup>1 2</sup>
SSD 7480	Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warialda region, Brigalow Belt South Bioregion (NA324)	Liverpool Plains (Part B)	6955 or 2964 <sup>3 4</sup>

<sup>1</sup> Credit obligation from 0056/2018/4751MP

<sup>2</sup> The applicant intends to retire 869 credits from Biobanking Agreement 43 in the future (DOC22/612474). This Statement of Reasonable Equivalence provides a credit equivalence for both scenarios: if these credits are retired from Biobanking Agreement 43, and if no credits are retired from a BioBanking Agreement.

<sup>3</sup> Credit obligation from 0056/2018/4749MP and 0056/2018/4751MP

<sup>4</sup> Condition 60B allows for 3,991 credits from this obligation to be created through mine site rehabilitation (DOC22/612474). This Statement of Reasonable Equivalence provides a credit equivalence for both scenarios: if these credits are created through mine site rehabilitation, or if all credits are met through equivalent BAM obligation.



SSD 7480	Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking clay soils mainly in the Liverpool Plains, Brigalow Belt South Bioregion (NA185)	Liverpool Plains (Part B)	3540 <sup>5</sup>
SSD 7480	Shallow freshwater wetland sedgeland in depressions on floodplains on inland alluvial plains and floodplains (NA201)	Liverpool Plains (Part B)	46 <sup>6</sup>
SSD 7480	Silver-leaved Ironbark - White Cypress Pine shrubby open forest of Brigalow Belt South Bioregion and Nandewar Bioregion (NA349)	Liverpool Plains (Part B)	1795 <sup>7</sup>
SSD 7480	River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion (NA193)	Liverpool Plains (Part B)	40 <sup>8</sup>
SSD 7480	Regent Honeyeater ( <i>Anthochaera phrygia</i> )	Not applicable	3,703
SSD 7480	Koala ( <i>Phascolarctos cinereus</i> )	Not applicable	1,308
SSD 7480	Squirrel Glider ( <i>Petaurus norfolcensis</i> )	Not applicable	1,672

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<sup>5</sup> Credit obligation from 0056/2018/4749MP and 0056/2018/4751MP

<sup>6</sup> Credit obligation from 0056/2018/4751MP

<sup>7</sup> Credit obligation from 0056/2018/4751MP

<sup>8</sup> Credit obligation from 0056/2018/4749MP

## Part 2 Determination of reasonable equivalence

The number and class of biodiversity credits that are reasonably equivalent under the BC Act are:

### Ecosystem Credits

1. **Name of Plant Community Type:** Narrow-leaved Ironbark - Black Cypress Pine - White Box shrubby woodland in sedimentary hills of the Gunnedah region, Brigalow Belt South Bioregion (PCT459)

<b>Number of ecosystem credits required if no Biobanking credits are retired</b>	593
<b>Number of ecosystem credits still required if 869 Biobanking credits are retired from BA43 (which have hollow-bearing trees)<sup>9</sup></b>	223
<b>Offset trading group</b>	Western Slopes Dry Sclerophyll Forests with percent cleared <50%
<b>Hollow bearing trees</b>	Vegetation containing hollow-bearing trees
<b>Vegetation class</b>	Western Slopes Dry Sclerophyll Forests
<b>Vegetation formation</b>	Dry Sclerophyll Forests (Shrubby sub-formation)
<b>IBRA<sup>10</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

<sup>9</sup> The 869 credits issued under BA43 have hollow-bearing trees; therefore if these credits are retired the obligation for PCT459 with hollow-bearing trees will be reduced (DOC22/742023).

<sup>10</sup> Interim Biogeographic Regionalisation for Australia



**2. Name of Plant Community Type:** Narrow-leaved Ironbark - Black Cypress Pine - White Box shrubby woodland in sedimentary hills of the Gunnedah region, Brigalow Belt South Bioregion (PCT459)

<b>Number of ecosystem credits required if no Biobanking credits are retired</b>	914
<b>Offset trading group</b>	Western Slopes Dry Sclerophyll Forests with percent cleared <50%
<b>Hollow bearing trees</b>	Not applicable
<b>Vegetation class</b>	Western Slopes Dry Sclerophyll Forests
<b>Vegetation formation</b>	Dry Sclerophyll Forests (Shrubby sub-formation)
<b>IBRA<sup>11</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

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<sup>11</sup> Interim Biogeographic Regionalisation for Australia

**3. Name of Plant Community Type:** Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warialda region, Brigalow Belt South Bioregion (PCT397)

<b>Number of ecosystem credits required if no credits are created through mine site rehabilitation</b>	610 <sup>12</sup>
<b>Number of ecosystem credits still required if 3,991 BAM credits are created through mine site rehabilitation</b>	610
<b>Offset trading group</b>	Pilliga Outwash Dry Sclerophyll Forests with percent cleared <50%
<b>Hollow bearing trees</b>	Vegetation containing hollow-bearing trees
<b>Vegetation class</b>	Pilliga Outwash Dry Sclerophyll Forests
<b>Vegetation formation</b>	Dry Sclerophyll Forests (Shrub/grass sub-formation)
<b>IBRA<sup>13</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

<sup>12</sup> Includes 30 credits from 0056/2018/4749MP and 580 credits from 0056/2018/4751MP

<sup>13</sup> Interim Biogeographic Regionalisation for Australia



**4. Name of Plant Community Type:** Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warialda region, Brigalow Belt South Bioregion (PCT397)

<b>Number of ecosystem credits required if no credits are created through mine site rehabilitation</b>	1,974 <sup>14</sup>
<b>Number of ecosystem credits still required if 3,991 BAM credits are created through mine site rehabilitation</b>	588
<b>Offset trading group</b>	Pilliga Outwash Dry Sclerophyll Forests with percent cleared <50%
<b>Hollow bearing trees</b>	Not applicable
<b>Vegetation class</b>	Pilliga Outwash Dry Sclerophyll Forests
<b>Vegetation formation</b>	Dry Sclerophyll Forests (Shrub/grass sub-formation)
<b>IBRA<sup>15</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

<sup>14</sup> Includes 22 credits from 0056/2018/4749MP and 1,952 credits from 0056/2018/4751MP

<sup>15</sup> Interim Biogeographic Regionalisation for Australia

**5. Name of Plant Community Type:** Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking clay soils mainly in the Liverpool Plains, Brigalow Belt South Bioregion (PCT101)

<b>Number of ecosystem credits required</b>	850 <sup>16</sup>
<b>Offset trading group</b>	Brigalow Clay Plain Woodlands with percent cleared $\geq 70\%$ and $< 90\%$
<b>Hollow bearing trees</b>	Vegetation containing hollow-bearing trees
<b>Vegetation class</b>	Brigalow Clay Plain Woodlands
<b>Vegetation formation</b>	Semi-arid Woodlands (Grassy sub-formation)
<b>IBRA<sup>17</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

**6. Name of Plant Community Type:** Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking clay soils mainly in the Liverpool Plains, Brigalow Belt South Bioregion (PCT101)

<b>Number of ecosystem credits required</b>	1,183 <sup>18</sup>
<b>Offset trading group</b>	Brigalow Clay Plain Woodlands with percent cleared $\geq 70\%$ and $< 90\%$
<b>Hollow bearing trees</b>	<b>Not applicable</b>
<b>Vegetation class</b>	Brigalow Clay Plain Woodlands
<b>Vegetation formation</b>	Semi-arid Woodlands (Grassy sub-formation)
<b>IBRA<sup>19</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

<sup>16</sup> Includes 847 credits from 0056/2018/4749MP and 4 credits from 0056/2018/4751MP

<sup>17</sup> Interim Biogeographic Regionalisation for Australia

<sup>18</sup> Includes 1,183 credits from 0056/2018/4751MP

<sup>19</sup> Interim Biogeographic Regionalisation for Australia



**7. Name of Plant Community Type:** Shallow freshwater wetland sedgeland in depressions on floodplains on inland alluvial plains and floodplains (PCT53)

<b>Number of ecosystem credits required</b>	22
<b>Offset trading group</b>	Inland Floodplain Swamps with percent cleared $\geq 50\%$ and $< 70\%$
<b>Hollow bearing trees</b>	Not applicable
<b>Vegetation class</b>	Inland Floodplain Swamps
<b>Vegetation formation</b>	Freshwater wetlands
<b>IBRA<sup>20</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

**8. Name of Plant Community Type:** Silver-leaved Ironbark - White Cypress Pine shrubby open forest of Brigalow Belt South Bioregion and Nandewar Bioregion (PCT594)

<b>Number of ecosystem credits required</b>	651
<b>Offset trading group</b>	North-west Slopes Dry Sclerophyll Woodlands with percent cleared $\geq 50\%$ and $< 70\%$
<b>Hollow bearing trees</b>	Vegetation containing hollow-bearing trees
<b>Vegetation class</b>	North-west Slopes Dry Sclerophyll Woodlands
<b>Vegetation formation</b>	Dry Sclerophyll Forests (Shrub/grass sub-formation)
<b>IBRA<sup>21</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

<sup>20</sup> Interim Biogeographic Regionalisation for Australia

<sup>21</sup> Interim Biogeographic Regionalisation for Australia

**9. Name of Plant Community Type:** Silver-leaved Ironbark - White Cypress Pine shrubby open forest of Brigalow Belt South Bioregion and Nandewar Bioregion (PCT594)

<b>Number of ecosystem credits required</b>	252
<b>Offset trading group</b>	North-west Slopes Dry Sclerophyll Woodlands with percent cleared $\geq 50\%$ and $< 70\%$
<b>Hollow bearing trees</b>	Not applicable
<b>Vegetation class</b>	North-west Slopes Dry Sclerophyll Woodlands
<b>Vegetation formation</b>	Dry Sclerophyll Forests (Shrub/grass sub-formation)
<b>IBRA<sup>22</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

**10. Name of Plant Community Type:** River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion (PCT78)

<b>Number of ecosystem credits required</b>	20 <sup>23</sup>
<b>Offset trading group</b>	Inland Riverine Forests with percent cleared $\geq 50\%$ and $< 70\%$
<b>Hollow bearing trees</b>	Vegetation containing hollow-bearing trees
<b>Vegetation class</b>	Inland Riverine Forests
<b>Vegetation formation</b>	Forested Wetlands
<b>IBRA<sup>24</sup> subregion</b>	Liverpool Plains and any IBRA subregion that adjoins the subregion within which the development occurs and any such subregion that is within 100 kilometres of the outer edge of the impact site.

<sup>22</sup> Interim Biogeographic Regionalisation for Australia

<sup>23</sup> Includes 20 credits from 0056/2018/4749MP. Note there is no Biobanking credit obligation generated for this PCT in 0056/2018/4751MP, therefore no equivalent BAM credits have been calculated.

<sup>24</sup> Interim Biogeographic Regionalisation for Australia



## Species Credits

**1.Name of threatened species:** Regent Honeyeater (*Anthochaera phrygia*)

<b>Number of species credits required</b>	0 <sup>25</sup>
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**2.Name of threatened species:** Koala (*Phascolarctos cinereus*)

<b>Number of species credits required</b>	1,308 <sup>26</sup>
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**3.Name of threatened species:** Squirrel Glider (*Petaurus norfolcensis*)

<b>Number of species credits required</b>	1,672 <sup>27</sup>
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This statement was issued on 7 October 2022.

Authorised by:



**AMY DUMBRELL**  
**A/Director Biodiversity Offsets Scheme**  
**Department of Planning Industry and Environment**  
 Delegate of the Environment Agency Head

<sup>25</sup>Regent Honeyeater is now considered a dual species credit species under the BAM, with 'species credit' habitat being as per mapped important areas. There are no mapped important areas in the project area, therefore the equivalent number of BAM credits for this species is 0.

<sup>26</sup>There are 18,503 matching credits are available on the public register of biobanking credits for Koala in 22 Biobanking Agreements including BA398 and BA228. In accordance with the approved method, a full recalculation of credit numbers for Koala credits was not undertaken.

<sup>27</sup>There are 7,193 matching credits are available on the public register of biobanking credits for Squirrel Glider (*Petaurus norfolcensis*) in 11 Biobanking Agreements including BA228 and BA449. In accordance with the approved method, a full recalculation of credit numbers for Squirrel Glider credits was not undertaken.

# Attachment 4

## Retirement #1 from Yarrari & Belah BA43



## Credit retirement report

**Effective date:** 08-December-2022

**Transaction number:** 202212-RT-804

### Credit owners' details

**Credit owner ID:** 47

**Name of credit holder:** Whitehaven Coal Limited

**Other owner(s):**

No other owners

**Reason for retirement:** To comply with a State significant development or State significant infrastructure project approval



Ecosystem credit(s) retired								
Number of credits	Credit profile ID	Agreement ID	Vegetation code	Vegetation type	CMA subregion	% surrounding vegetation	Patch size	Vegetation formation(see key)
869	304	43	NA228	NA228/White Cypress Pine - Narrow-leaved Ironbark shrub/grass open forest of the western Nandewar Bioregion	Peel - Namoi	>70%	>100 ha	DSS

**Key to vegetation formations**

<b>Code</b>	<b>Vegetation formation</b>
ALP	Alpine complex
ASA	Arid shrublands (Acacia)
ASC	Arid shrublands (Chenopod)
DSG	Dry sclerophyll forests (shrub/grass)
DSS	Dry sclerophyll forests (shrubby)
FRW	Forested wetlands
FWW	Freshwater wetlands
GLD	Grasslands
GRW	Grassy woodlands
HLD	Heathlands
MES	Miscellaneous ecosystems
RFT	Rainforests
SAW	Saline wetlands
SWG	Semi-arid woodlands (grassy)
SWS	Semi-arid woodlands (shrubby)
WSG	Wet sclerophyll forests (grassy)
WSS	Wet sclerophyll forests (shrubby)

The credit register provides further information about credit holdings and reports about credit trading activity. To view this information, please visit the public register website at [www.environment.nsw.gov.au/bimspr/index.htm](http://www.environment.nsw.gov.au/bimspr/index.htm)

For more information, please contact the BioBanking Scheme Manager - phone (02) 9995 6753; email [biobanking@environment.nsw.gov.au](mailto:biobanking@environment.nsw.gov.au)



# Attachment 5

## Retirement #2 from Mt Somner BS0071



## Credit retirement report

Approved Date 3/04/2024

Transaction number CT-3082, CT-3083, CT-3087

Case Number 00047183

### Credit holder details

Credit holder (s)	ID	Name
	C-015959	Coalworks Limited

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah and Narrabri

Date of obligation to retire 15/09/2021



## Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0071	00036884	CH-320	CR-33622	798	White Box - White Cypress Pine shrubby hills open forest mainly in the Nandewar Bioregion	588	North-west Slopes Dry Sclerophyll Woodlands >=50% and <70%	North-west Slopes Dry Sclerophyll Woodlands	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	Yes
BS0071	00036884	CH-320	CR-33623	105	White Box - White Cypress Pine shrubby hills open forest mainly in the Nandewar Bioregion	588	North-west Slopes Dry Sclerophyll Woodlands >=50% and <70%	North-west Slopes Dry Sclerophyll Woodlands	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	



### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name
BS0071	00036884	CH-320	CR-33624	1308	10616	Phascolarctos cinereus	Koala

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

This information is only current as of the date of provision and may not reflect subsequent legislative, policy or procedural changes.

Environment and Heritage Group, Department of Planning and Environment, Locked Bag 5022, Parramatta NSW 2124. Phone: 1300 361 967 (environment and national parks enquiries); email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au); website: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

# Attachment 6

## Retirement #3 from Wean Amalgamated BS0145



## Credit retirement report

Approved Date 3/04/2024

Transaction number CT-3095, CT-3096, CT-3097, CT-3099, CT-3102, CT-3104, CT-3106

Case Number 00047188

### Credit holder details

Credit holder (s)	ID	Name
	C-014824	WHITEHAVEN COAL MINING LTD

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to retire 12/08/2020





## Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0145	00046277	CH-512	CR-33615	1137	Narrow-leaved Ironbark - cypress pine - White Box shrubby open forest in the Brigalow Belt South Bioregion and Nandewar Bioregion	592	Western Slopes Dry Sclerophyll Forests >=50% and <70%	Western Slopes Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrubby sub-formation)	Liverpool Plains	Yes
BS0145	00046277	CH-512	CR-33616	178	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	Yes

					Brigalow Belt South Bioregion						
BS0145	00046277	CH-512	CR-33617	243	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the Brigalow Belt South Bioregion	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	
BS0145	00046277	CH-512	CR-33618	1380	Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warialda region, Brigalow Belt South Bioregion	397	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	Yes
BS0145	00046277	CH-512		1601		101					Yes

			CR-33619		Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking clay soils mainly in the Liverpool Plains, Brigalow Belt South Bioregion		Brigalow Clay Plain Woodlands >=70% and <90%	Brigalow Clay Plain Woodlands	Semi-arid Woodlands (Grassy sub-formation)	Liverpool Plains	
BS0145	00046277	CH-512	CR-33620	432	Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking clay soils mainly in the Liverpool	101	Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow	Brigalow Clay Plain Woodlands	Semi-arid Woodlands (Grassy sub-formation)	Liverpool Plains	Yes (including artificial)



					Plains, Brigalow Belt South Bioregion		Belt South Bioregions				
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### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name
BS0145	00046277	CH-512	CR-33621	1241	10604	Petaurus norfolcensis	Squirrel Glider

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

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Environment and Heritage Group, Department of Planning and Environment, Locked Bag 5022, Parramatta NSW 2124. Phone: 1300 361 967 (environment and national parks enquiries); email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au); website: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

# Attachment 7

## Retirement #4 from Greenwood BS0143



## Credit retirement report

Approved Date 8/04/2024

Transaction number CT-3187

Case Number 00047309

### Credit holder details

Credit holder (s)	ID	Name
	C-014824	WHITEHAVEN COAL MINING LTD

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to retire 12/08/2020





### Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0143	00045779	CH-503	CR-33675	125	Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warialda region, Brigalow Belt South Bioregion	397	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Liverpool Plains	

### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

This information is only current as of the date of provision and may not reflect subsequent legislative, policy or procedural changes.

Environment and Heritage Group, Department of Planning and Environment, Locked Bag 5022, Parramatta NSW 2124. Phone: 1300 361 967 (environment and national parks enquiries); email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au); website: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

# Attachment 8

## Retirement #5 from Blue Vale BS0144



## Credit retirement report



Approved Date 8/04/2024

Transaction number CT-3150, CT-3153, CT-3155

Case Number 00047306

### Credit holder details

Credit holder (s)	ID	Name
	C-014824	WHITEHAVEN COAL MINING LTD

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to retire 12/08/2020

## Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0144	00046220	CH-509	CR-33672	4	Shallow freshwater wetland sedgeland in depressions on floodplains on inland alluvial plains and floodplains	53	Inland Floodplain Swamps ≥50% and <70%	Inland Floodplain Swamps	Freshwater Wetlands	Liverpool Plains	
BS0144	00046220	CH-509	CR-33673	2	River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow	78	Inland Riverine Forests ≥50% and <70%	Inland Riverine Forests	Forested Wetlands	Liverpool Plains	Yes

					Belt South Bioregion						
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### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name
BS0144	00046220	CH-509	CR-33674	431	10604	Petaurus norfolcensis	Squirrel Glider

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

This information is only current as of the date of provision and may not reflect subsequent legislative, policy or procedural changes.

Environment and Heritage Group, Department of Planning and Environment, Locked Bag 5022, Parramatta NSW 2124. Phone: 1300 361 967 (environment and national parks enquiries); email: [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au); website: [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)



# Attachment 9

## Retirement #6 from CST Credit Transfer & Retirement



## Credit retirement report



Approved Date 18/04/2024

Transaction number CT-3288, CT-3289

Case Number 00047542

### Credit holder details

Credit holder (s)	ID	Name
	C-014824	WHITEHAVEN COAL MINING LTD

Reason For Retiring For the purpose of complying with a requirement to retire biodiversity credits of a planning approval or a vegetation clearing approval

Reference number SSD 7480 and EPBC 2016/7649

Address of Obligation Blue Vale Road, Gunnedah NSW 2380

Local government area Gunnedah Shire Council and Narrabri Shire Council

Date of obligation to retire 12/08/2020

## Ecosystem Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	PCT Name	PCT ID	Offset trading group	Vegetation class	Vegetation Formation	IBRA Subregion	Hollow Bearing Trees
BS0152	00046748	CH-556	CR-33977	548	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the Brigalow Belt South Bioregion	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Pilliga Outwash	Yes
BS0152	00046748	CH-556	CR-33978	110	Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the Brigalow Belt	88	Pilliga Outwash Dry Sclerophyll Forests <50%	Pilliga Outwash Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrub/grass sub-formation)	Pilliga Outwash	



					South Bioregion						
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### Species Credits

Source BSA ID	Source BOAMS ID	Source Credit Holding ID	Credit ID	Number of credits	Species ID	Scientific Name	Common Name

The retirement of a biodiversity credit is registered on the BOS Public Register in the Transactions register. Section 6.30 Biodiversity Conservation Regulation 2017 provides that retirement of a biodiversity credit is to be conclusively presumed if the retirement is recorded in the public register. The public register of biodiversity offset credits provides further information about biodiversity credit holdings and biodiversity credit trading activity. To view this information, please visit the Biodiversity Offset Scheme Public Registers.

This information is only current as of the date of provision and may not reflect subsequent legislative, policy or procedural changes.

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# Attachment 10

## Retirement #7 from BCF Payment



## Statement confirming payment into the Biodiversity Conservation Fund for an offset obligation

Pursuant to section 6.33 of the *Biodiversity Conservation Act 2016*, the NSW Biodiversity Conservation Trust confirms that the following payments have been made into the Biodiversity Conservation Fund under section 6.30(1) of the Act to satisfy an obligation to retire biodiversity credits.

Payment made by		Vickery Coal Pty Ltd			
Date received		11 April 2024			
NSW statutory obligation reference <sup>1</sup>		SSD-7480			
Commonwealth EPBC Act controlled action reference (if applicable) <sup>2</sup>		Yes			
BCT Reference		BCF701			
Biodiversity credit retirement obligations satisfied by payment to the Biodiversity Conservation Fund:					
Biodiversity credit type (Credit ID and name)	Offset trading group	EPBC Act Controlled Action offset obligation (Y / N)	Number of credits	Cost per credit (Exc. GST)	Total payment per credit type (Exc. GST)
53 - Shallow freshwater wetland sedgeland in depressions on floodplains on inland alluvial plains and floodplains	Inland Floodplain Swamps >=50% and <70%	Y	18	\$7,783.64	\$140,105.52
78 - River Red Gum riparian tall woodland / open forest wetland in the Nandewar Bioregion and Brigalow Belt South Bioregion	Inland Riverine Forests >=50% and <70%	Y	18	\$4,394.06	\$79,093.08
Total (Exc. GST)					\$219,198.60
GST					\$21,919.86
Total (Inc. GST)					\$241,118.46



Emily McCosker 16/04/2024

**Director Strategy & Finance**

<sup>1</sup> This refers to either; a development application number for a development consent under Part 4 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*, a State significant infrastructure approval under the previous Part 5.1 (now Part 5, Division 5.2) of the EP&A Act, a decision of a determining authority to carry out or approve the carrying out of an activity under Part 5 of the EP&A Act, or a biobank statement number or biodiversity certification number.

<sup>2</sup> This refers to a controlled action under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* for which a biodiversity offset obligation has been met through payment into the BCF.



# Attachment 11

## Approval of Vickery Revised Biodiversity Offset Strategy and Substituted Offset Areas





Our ref: DOC24/188450

Your ref: SSD 7480

Philip Nevill  
Senior Environmental Assessment Officer  
Energy and Resource Assessment  
Department of Planning, Housing & Infrastructure  
[philip.neville@planning.nsw.gov.au](mailto:philip.neville@planning.nsw.gov.au)

Dear Philip,

**Vickery Coal 2 – Revised biodiversity offset strategy (SSD 7480)**

Thank you for your e-mails dated 23 and 27 February, and request via the Major Project Portal on 7 March 2024, to the Biodiversity, Conservation and Science Directorate (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) providing additional information on the progress of biodiversity credit retirement and an updated version of the revised biodiversity offset strategy (BOS) for Vickery Coal 2.

We appreciate the inclusion of additional information in the BOS to address the recommendations in our letter dated 2 February 2024. As recommended, the BOS now includes additional information for:

- the criteria used to select the substitute offset sites,
- justification for replacing offset Areas 2 to 5,
- land management history for the original and the substitute offset sites,
- data enabling a comparison of current vegetation condition and species habitat between the original and substitute offset sites,
- details of the restoration program for the substitute offset sites.

We are of the view that the substitute offset sites as described in the revised BOS are capable of meeting the condition under Condition B56 of the project consent. Evidence that long term security of the offset sites has been established should be provided prior to discharging the requirements of this condition.

Specific comments on the revised information in the BOS is provided below.

**Advantages of the substitute offset sites**

The Vickery substitute offsets will be consolidated with other Whitehaven offset areas. We concur with the revised BOS findings that, with management for restoration and conservation, the substitute offset areas will:

- Provide landscape connectivity between Boonalla Community Conservation Area and Vickery State Forest
- Experience lower edge effects than the original offset areas 2 to 5
- Be less vulnerable to stochastic events than offset areas 2 to 5
- Be more efficient to manage for conservation, especially when combined with the other Whitehaven offset areas.

### Comparative condition of original and substitute offset sites

The additional information provides a comparison for plant community type (PCT) 101 Poplar Box - Yellow Box - Western Grey Box grassy woodland on cracking clay soils mainly in the Liverpool Plains, Brigalow Belt South Bioregion. This comparison indicates that the vegetation in the substitute offset sites is in lower condition than original offset sites 2 to 5, as follows:

- The substitute offset sites have had a history of more intense agricultural disturbance than the original offset sites 2 to 5. Agricultural activities on the original offset sites ceased in mid-2017. The substitute offset sites have been largely cleared since before 1966. The BOS does not state when agricultural activities ceased on the substitute offset sites.
- The vegetation condition of PCT 101 woodland areas in the substitute offset areas is similar to that in the original offset areas 2 to 5. The substitute offset areas have a vegetation integrity (VI) score of 73.5 compared with 74.1 in the original offset areas.
- The vegetation condition of PCT 101 derived native grassland (DNG) is lower in the substitute offset areas (VI score of 36.1) compared with the original offset areas (VI score of 48).
- The area of PCT 101 woodland in the original offsets is significantly higher (122.02 ha) than the substitute offset areas (18.7 ha).
- The area of PCT 101 DNG in the original offset areas 2 to 5 is substantially lower (6.04 ha) than in the substitute offset areas (432.16).

Please note that PCT 101 is incorrectly named as *Liverpool Plains grassland mainly on basaltic black earth soils, Brigalow Belt South Bioregion* in sections 5.1.2 to 5.1.4 of the revised BOS.

### Comment on future vegetation integrity scores

Table 5.7 provides a comparative assessment of vegetation integrity between original and substituted offset areas using data generated by the Biodiversity Assessment Method Calculator (BAM-C). This includes the future VI scores after 20 years of conservation management.

Section 4.2.4 provides the method for calculating the future gain in vegetation integrity, stating that:

*Data collected from BAM plots across all offset areas were analysed to provide an overall current Vegetation Integrity Score (VI) and an overall VI Score with Management, including Active Restoration Management Actions (ARMA) restoration in DNGs on the substitute offset areas, at year 20.*

The revised BOS does not state whether the BAM-C VI scores for year 20 assume the same management actions (eg ARMA restoration in DNGs) for both the original offset areas 2 to 5 and the substitute offset sites.

It is therefore unclear whether the total gains in VI score are directly comparable, especially for DNG. The higher gain in VI score for the substituted offset areas (VI score gain of 9) compared with the original offset sites (VI score gain of 3.7) may be due to:

- Different management actions being entered into the BAM-C
- The substituted offset sites having a lower current VI score. This means that, as they are currently further below the benchmark for PCT 101, they have more scope for VI gain.

Table 5.2 also provides a total indicative credit generation for the original offset areas and substituted offset areas. The credit generation of the substitute offset areas is likely to be greater due to their larger size (450.86 ha compared with 128.06 ha for the original offsets) and the greater VI gain in PCT 101 DNG.

### Security of offsets

Condition B57 of the Vickery Extension Project (SSD 7480) requires the Applicant to make suitable arrangements to provide long term security for offset areas 2 to 5 within 2 years of commencement of development unless otherwise agreed by the Planning Secretary.



The BOS does not outline whether long term security has been provided for offset areas 2 to 5.

The email provided to BCS on 23 February included an update on progress towards satisfying the biodiversity offset requirements of SSD 7480. This states that Whitehaven Coal has submitted applications to the Biodiversity Conservation Trust (BCT) on 31 March 2023 for conservation agreements over the substitute offset areas. Whitehaven Coal is working with the BCT to secure the substitute offsets on title by 28 April 2024.

### Conclusion

In the development consent for the Vickery Extension Project (SSD 7480), a note under Condition B56 states that any area of the offset strategy in Table 9 of the consent may be substituted with an alternative offset site subject to demonstration of equivalent biodiversity outcomes and to the satisfaction of the Secretary.

We are satisfied that the BOS now contains adequate information to allow the consent authority to decide whether the biodiversity outcomes of the substitute offset sites are equivalent to those of offset areas 2 to 5.

If you have any questions about this advice, please do not hesitate to contact Liz Mazzer, Senior Conservation Planning Officer, via [liz.mazzer@environment.nsw.gov.au](mailto:liz.mazzer@environment.nsw.gov.au) or (02) 6883 5325.

Yours sincerely



**Calvin Houlison**

**Senior Team Leader Planning North West**

**Biodiversity, Conservation and Science**

8 March 2024

Cc: Andrew Wright, Group Superintendent – Biodiversity, Whitehaven Coal Limited

[AWright@whitehavencoal.com.au](mailto:AWright@whitehavencoal.com.au)

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Group Manager – Approvals and Biodiversity  
Vickery Coal Pty Ltd  
By email: [tdwyer@whitehavencoal.com.au](mailto:tdwyer@whitehavencoal.com.au)

13/03/2024

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**Subject: Revised Biodiversity Offset Strategy**

Dear Mr Dwyer

Thank you for submitting the Revised Biodiversity Offset Strategy in accordance with condition B56 of the development consent for the Vickery Coal Mine Extension Project (SSD 7480). I also acknowledge your response to the Department's requests for additional information.

I note the strategy has been prepared in consultation with the Biodiversity Conservation and Science Directorate of the NSW Department of Climate Change, Energy, the Environment and Water, and contains the information required by the conditions of consent. Accordingly, as nominee of the Planning Secretary, I approve the Revised Biodiversity Offset Strategy (Rev 5, dated 12 March 2024).

You are reminded that the Biodiversity Management Plan, required by condition B63 of SSD 7480 must be reviewed and revised to include any relevant changes. Please ensure that all relevant management plans and strategies are reviewed and updated to reflect the changes in the strategy.

You are reminded that if there are any inconsistencies between the strategy and the conditions of approval, the conditions prevail. Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Philip Nevill on (02) 8275 1036.

Yours sincerely



**Stephen O'Donoghue**  
**Director**  
**Resource Assessments**  
As nominee of the Planning Secretary