

APPENDIX A

PROJECT APPROVALS



Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the project applications referred to in Schedule 1, subject to the preamble in Schedule 1 and the conditions in Schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/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 projects.



The Hon Tony Kelly MLC
Minister for Planning MP

26 NOV 2010

Sydney

2010

SCHEDULE 1

Application Numbers:	08_0101 and 08_0102
Proponent:	Integra Coal Operations Pty Ltd
Approval Authority:	Minister for Planning
Land:	See Appendix 1
Project 08_0101:	Integra Underground Project
Project 08_0102:	Integra Open Cut Project

Preamble:

While a single document, this instrument contains two project approvals: one for the Integra underground project and the other for the Integra open cut project. For the purposes of project 08_0101, this instrument applies only to the underground project area. For the purposes of project 08_0102, this instrument applies only to the Integra open cut project area. Together these project areas are considered to comprise the Integra mine complex.

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	5
Obligation to Minimise Harm to the Environment	5
Terms of Approval	5
Limits on Approval	5
Surrender of Consents & Approvals	6
Structural Adequacy	6
Demolition	6
Operation of Plant & Equipment	6
Staged Submission of Any Strategy, Plan and Program	6
ENVIRONMENTAL PERFORMANCE CONDITIONS	7
Acquisition Upon Request	7
Noise	7
Blasting	12
Air Quality & Greenhouse Gas	14
Meteorological Monitoring	16
Subsidence	16
Soil & Water	17
Biodiversity	20
Heritage	21
Transport	22
Visual	22
Waste	22
Bushfire Management	22
Rehabilitation	22
ADDITIONAL PROCEDURES	25
Notification of Landowners	25
Independent Review	25
Land Acquisition	26
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	28
Environmental Management	28
Reporting	29
Independent Environmental Audit	29
Access to Information	30
APPENDIX 1: SCHEDULE OF LAND	31
APPENDIX 2: PREVIOUS EAS	35
APPENDIX 3: PROJECT AREAS	36
APPENDIX 4: PROJECT LAYOUT PLANS	38
APPENDIX 5: LAND OWNERSHIP PLANS & RESIDENTIAL RECEIVERS	41
APPENDIX 6: ALTERNATE NOISE CONDITIONS	45
APPENDIX 7: GLENNIES CREEK AND STATION CREEK ALLUVIAL AQUIFERS	47
APPENDIX 8: AREA FOR FURTHER ARCHAEOLOGICAL INVESTIGATION	48
APPENDIX 9: CONCEPTUAL FINAL LANDFORM AND OFFSETS	49
APPENDIX 10: STATEMENT OF COMMITMENTS	52

DEFINITIONS

Annual review	The review required by Condition 3 of Schedule 5
Approved mine plans	The plans for underground mining depicted in the figures in Appendix 4
Adaptive management	Adaptive management includes monitoring subsidence effects and impacts and, based on the results, modifying the mine plan as mining proceeds to ensure that the effects, impacts and/or associated environmental consequences remain within predicted and/or designated ranges
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
Blast misfire	The failure of one or more holes in a blast pattern to initiate
Built features	Includes any building or work erected or constructed on land, and includes dwellings and infrastructure such as any formed road, street, path, walk or driveway, any pipeline, water, sewer, telephone, gas or other service main
CCC	Community Consultative Committee
CHPP	Coal Handling and Preparation Plant
Conditions of this approval	Conditions contained in Schedules 2 to 5 inclusive
Council	Singleton Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DECCW	Department of Environment, Climate Change and Water
Department	Department of Planning
Director-General	Director-General of the Department, or delegate
EEC	Endangered Ecological Community as defined under the NSW <i>Threatened Species Conservation Act 1995</i>
Environmental consequences	The environmental consequences of subsidence impacts, including: damage to built features; loss of surface water flows to the subsurface; loss of standing pools; adverse water quality impacts; development of iron bacterial mats; rock falls; damage to Aboriginal heritage sites; impacts on aquatic ecology; and ponding
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or carry out
First workings	Development of main headings and gateroads underground
Heritage Branch	Heritage Branch of the Department
I&I NSW	Department of Industry and Investment, trading as Industry and Investment NSW
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval
Integra mine complex	The open cut and underground project areas, considered collectively
Land	In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to the noise and air quality conditions in Schedules 3 and 4 it means 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 approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the projects
MSB	NSW Mine Subsidence Board
NAG	Noise assessment group, see the figures in Appendix 5 for more detail
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Northern mining area	The area outlined with a solid white line on the figure in Appendix 3 titled "open cut project area"
NOW	NSW Office of Water
OC statement of commitments	The Proponent's commitments for the open cut project in Appendix 10
Offset strategy	The biodiversity and enhancement program described in the EA, and depicted generally in the figure in Appendix 8
Open cut mining operations	Includes overburden removal and the extraction, processing, handling, storage and transportation of coal within the open cut project area
Open cut project	The development described in the open cut project EA

Open cut project area	All land to which project application 08_0102 applies, as listed in Appendix 1 and outlined with a solid black line on the figure in Appendix 3
Open cut project EA	Environmental assessment titled <i>Integra Open Cut Project</i> , dated June 2009, and the associated response to submissions titled <i>Submissions Report</i> , dated March 2010
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Previous open cut EAs	The documents listed in Appendix 2
Previous underground EAs	The documents listed in Appendix 2
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Projects	The open cut project and underground project considered collectively, including the implementation of any development associated with the previous open cut and underground EAs
Proponent	Integra Coal Operations Pty Ltd, or its successors
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, gas supply, drainage, sewerage, telephony, telecommunications etc
Reasonable	Reasonable relates to the application of 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
Rehabilitation	The treatment or management of land disturbed by the projects for the purpose of establishing a safe, stable and non-polluting environment, and includes remediation
Remediation	Activities associated with partially or fully repairing the impacts and/or environmental consequences of the project
ROM coal	Run-of-mine coal
RTA	Roads and Traffic Authority
Safe, serviceable and repairable	Safe means no danger to users, serviceable means available for its intended purpose, and repairable means damaged components can be repaired economically
Second workings	Extraction of coal from longwall panels, mini-wall panels or pillar extraction
Site	The land listed in Appendix 1, known collectively as the Integra mine complex
Subsidence	The totality of subsidence effects and impacts and their associated environmental consequences
Subsidence effects	Deformation of the ground mass due to mining, including all mining-induced ground movements, including both vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
UG statement of commitments	The Proponent's commitments for the underground project in Appendix 10
Underground mining operations	Includes first workings and the extraction, processing, handling, storage, and transportation of coal within the underground project area
Underground project	The development described in the underground project EA
Underground project area	All land to which project application 08_0101 applies, as listed in Appendix 1 and outlined with a dashed black line on the figure in Appendix 3
Underground project EA	Environmental assessment titled <i>Proposed Integra Underground Coal Project</i> , dated July 2009, and the associated response to submissions, titled <i>Integra Underground Project Collated Response to Submissions</i> , dated March 2010
Western mining area	The area outlined with a solid light blue line on the figure in Appendix 3 titled "open cut project area"

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction operation or rehabilitation of the projects.

TERMS OF APPROVAL

2. The Proponent shall carry out the open cut project generally in accordance with the:
 - (a) previous open cut EAs;
 - (b) open cut project EA;
 - (c) OC statement of commitments; and
 - (d) conditions of this approval.
3. The Proponent shall carry out the underground project generally in accordance with the:
 - (a) previous underground EAs;
 - (b) underground project EA;
 - (c) UG statement of commitments; and
 - (d) conditions of this approval.

Notes to Conditions 2 & 3:

- The general layout of the projects is shown in Appendix 4;
- This project approval is intended to regulate all existing and approved development on site; and
- The Proponent is to operate and manage both projects, to the greatest extent practicable, as an integrated mining complex.

4. If there is any inconsistency between the documents listed in condition 2 above, or any inconsistency between the documents listed in condition 3 above, the most recent document in the relevant condition shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
5. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
 - (a) any reports, strategies, plans, programs, reviews, audits, or correspondence that are submitted in accordance with the conditions of this approval; and
 - (b) the implementation of any actions or measures contained in these documents.

LIMITS ON APPROVAL

Mining Operations

6. The Proponent may carry out open cut mining operations on site until 31 December 2022.
7. The Proponent may carry out underground mining operations on site until 31 December 2035.

Note to Conditions 6 & 7: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Director-General and the Director-General of I&I NSW. Consequently, this approval will continue to apply in all respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

Coal Production

8. The Proponent shall not extract more than:
 - (a) 1.5 million tonnes of ROM coal from the open cut mining operations in the northern mining area in a calendar year;
 - (b) 4.5 million tonnes of ROM coal from the open cut mining operations in the western mining area in a calendar year; and
 - (c) 4.5 million tonnes of ROM coal from the underground mining operations on site in a calendar year.

Coal Transport

9. The Proponent shall not:
 - (a) export more than 7.3 million tonnes of coal from the site in a calendar year;
 - (b) dispatch more than 7 trains a day from the site; and
 - (c) dispatch more than 3 trains a day from the site, when averaged over each calendar year.

10. The Proponent shall not transport coal from the site by road, except in an emergency situation and with the prior written approval of the Director-General.

Hours of Operation

11. The Proponent shall only carry out:
 - (a) open cut mining operations in the northern mining area during the day and evening; and
 - (b) vegetation clearing and topsoil stripping on site between 7am and 6pm.

SURRENDER OF CONSENTS AND APPROVALS

12. By the end of June 2011, or as otherwise agreed by the Director-General, the Proponent shall surrender all existing development consents and project approvals for the site (other than this approval and the development consent for the Glennies Creek to Ashton Water Pipeline granted by Council on 13 February 2004) in accordance with Sections 75YA and 104A of the EP&A Act.

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

13. Prior to the surrender of these consents and/or approvals, the conditions of this approval (including any notes) shall prevail to the extent of any inconsistency with the conditions of these consents and/or approvals.

STRUCTURAL ADEQUACY

14. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA and MSB.

Notes:

- Under Part 4A of the EP&A Act, the Proponent 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 projects; and
- The Integra mine complex is located in the Patrick Plains Mine Subsidence District. Under Section 15 of the Mine Subsidence Compensation Act 1961, the Proponent is required to obtain the MSB's approval before constructing or relocating any improvements on site.

DEMOLITION

15. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

OPERATION OF PLANT AND EQUIPMENT

16. The Proponent shall ensure that all the plant and equipment used on site, or to transport coal from the site, is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

STAGED SUBMISSION OF ANY STRATEGY, PLAN AND PROGRAM

17. With the approval of the Director-General, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

Note: While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations of the site are covered by suitable strategies, plans or programs at all times.

18. Until they are replaced by an equivalent strategy, plan or program approved under this approval, the Proponent shall continue to implement the existing strategies, plans or programs for development on site that have been approved under previous consents or approvals.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

ACQUISITION UPON REQUEST

- Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in Conditions 6-7 of Schedule 4.

Table 1: Land subject to acquisition upon request

Noise	Air Quality	Subsidence
9 – W & N Pendered	-	-
10 – E & B Kleinman	-	-
13 – P & K Russell	-	-
64 – W & A Gardner	-	-
-	-	47 B & R Cherry
80 – G Donnellan	-	-
87 – B & R Richards	87 – B & R Richards	-
106 – B & R Richards	-	-
110 – G J Hall	-	-
153 – R & D Hall	153 – R & D Hall	-
351 – Andrews	-	-
352 – Andrews	-	-

Note: To identify the locations referred to in Table 1, see the figures in Appendix 5.

Once, in the opinion of the Director-General, the open cut mining operations have been substantially completed on site this condition shall be replaced with Condition 1 of Appendix 6.

NOISE

Noise Criteria

- Except for the noise-affected land referred to in Table 1, the Proponent shall ensure that the noise generated by the projects does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 2: Noise criteria dB(A)

Location		Day	Evening	Night	
		L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{A1} (1min)
NAG 1	All privately-owned land	38	38	36	46
NAG 2	All privately-owned land	39	39	37	47
NAG 3	All privately-owned land	40	40	39	49
NAG 4	99, 100	39	39	39	47
	88, 91, 95	40	40	40	47
	105, 161	41	41	41	47
	All other privately-owned land	42	42	37	47
NAG 5	104	35	35	35	52
	139	36	36	36	52
	103	37	37	37	52
	121	40	40	40	52
	118, 154	43	43	43	52
	112	45	45	45	52
	111	47	47	47	52
	All other privately-owned land	50	46	42	52

NAG 6	137	35	35	35	48
	133	37	37	37	48
	132	38	38	38	48
	All other privately-owned land	41	41	38	48
NAG 7	All privately-owned land	45	42	39	49
NAG 8	142	35	35	35	45
	All other privately-owned land	42	42	35	45
NAG 9	146, 148, 149	35	35	35	48
	143, 144, 145, 147, 150, 151, 152	36	36	36	48
	2	37	37	37	48
	3, 4	39	39	39	48
	All other privately-owned land	40	40	38	48
NAG 10	5	40	40	40	47
	6, 11	41	41	41	47
	8	42	42	42	47
	All other privately-owned land	39	39	37	47
NAG 11	18	35	35	35	49
	20, 21	37	37	36	49
	19	37	37	37	49
	17	38	38	38	49
	7	39	39	39	49
	12, 15	40	40	40	49
	14, 16	42	42	42	49
	All other privately-owned land	41	41	39	49
NAG 12	52, 55	35	35	35	45
	51, 56	37	37	37	45
	53, 57	38	38	38	45
	50, 54	39	39	39	45
	62	40	40	40	45
	All other privately-owned land	38	38	35	45
NAG A	24, 25, 26, 27, 28, 29, 30, 36, 37, 38, 39, 40, 41	35	35	35	46
	31	36	36	35	46
	42, 43	36	36	36	46
	32	37	37	35	46
	22, 23	37	37	37	46
	34	39	39	36	46
	35	39	39	35	46
	All other privately-owned land	39	39	36	46
NAG B	All privately-owned land	37	37	35	45
NAG C	47	39	39	39	45
	63	40	40	40	45
NAG D	All other privately-owned land	37	37	35	45
	44, 48	36	36	36	48
	49	39	39	39	48
	All other privately-owned land	40	40	38	48
NAG F	65, 66	39	39	39	50
	67	40	40	40	50
	68	42	42	42	50
	All other privately-owned land	40	40	40	50
NAG G	All privately-owned land	41	41	39	50

All other privately-owned land	35	35	35	45
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Notes:

- To identify the locations referred to in Table 2, see the figures in Appendix 5; and
- Noise generated by the projects is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

Once, in the opinion of the Director-General, the open cut mining operations have been substantially completed on site this condition shall be replaced with Condition 2 of Appendix 6.

Noise Acquisition Criteria

3. If noise generated by the projects exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner, the Proponent shall acquire the land in accordance with the procedures in Conditions 6-7 of Schedule 4.

Table 3: Noise Acquisition Criteria dB(A)

Location	Day	Evening	Night
	$L_{Aeq}(15min)$	$L_{Aeq}(15min)$	$L_{Aeq}(15min)$
All privately-owned land in NAG 1	44	44	42
All privately-owned land in NAG 2	45	45	43
All privately-owned land in NAG 3	46	46	45
All privately-owned land in NAG 4	48	48	43
All privately-owned land in NAG 5	56	52	48
All privately-owned land in NAG 6	47	47	44
All privately-owned land in NAG 7	51	48	45
All privately-owned land in NAG 8	48	48	41
All privately-owned land in NAG 9	46	46	44
All privately-owned land in NAG 10	45	45	43
All privately-owned land in NAG 11	47	47	45
All privately-owned land in NAG 12	44	44	41
All privately-owned land in NAG A	45	45	42
All privately-owned land in NAG B	43	43	41
All privately-owned land in NAG C	43	43	41
All privately-owned land in NAG D	46	46	44
All privately-owned land in NAG F	46	46	46
All privately-owned land in NAG G	47	47	45
All other privately-owned land	41	41	41

Notes:

- To identify the locations referred to in Table 3, see the figures in Appendix 5;
- Noise generated by the projects is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy; and
- For this condition to apply, the exceedances of the criteria must be systemic.

Cumulative Noise Criteria

4. Except for the noise-affected land referred to in Table 1, the Proponent shall implement all reasonable and feasible measures to ensure that the noise generated by the projects combined with the noise generated by other mines in the area does not exceed the criteria in Table 4 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 4: Cumulative Noise Criteria dB(A) L_{Aeq} (period)

Location	Day	Evening	Night
NAGs 4, 5, 8 and 9	55	45	40
All other privately-owned land	50	45	40

Notes:

- To identify the locations referred to in Table 4, see the figures in Appendix 5; and
- Cumulative noise is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

Cumulative Noise Acquisition Criteria

- If the noise generated by the projects combined with the noise generated by other mines in the area exceeds the criteria in Table 5 at any residence on privately-owned land or on more than 25 percent of privately-owned land, then upon receiving a written request for acquisition from the landowner, the Proponent shall acquire the land on as equitable basis as possible with the relevant mines in accordance with the procedures in Conditions 6-7 of Schedule 4.

Table 5: Cumulative Noise Acquisition Criteria dB(A) L_{Aeq} (period)

Location	Day	Evening	Night
NAGs 4, 5, 8 and 9	60	50	45
All other privately-owned land	55	50	45

Notes:

- To identify the locations referred to in Table 5, see the applicable figures in Appendix 5;
- Cumulative noise is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy; and
- For these conditions to apply, the exceedances of the criteria must be systemic.

Additional Noise Mitigation Measures

- Upon receiving a written request from the owner of any residence:
 - on the land listed in Table 1; or
 - on land listed in Table 6; or
 - on privately-owned land where subsequent noise monitoring shows the noise generated by the projects is greater than or equal to the criteria in Table 7,
 the Proponent shall implement additional noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. These measures must be reasonable and feasible.

If within 3 months of receiving this request from the owner, the Proponent 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 Director-General for resolution.

Once, in the opinion of the Director-General, the open cut mining operations have been substantially completed on site Table 6 in this condition shall be replaced with the Table in Condition 3 of Appendix 6.

Table 6: Land where additional noise mitigation measures are available on request

5 – D P Cox	6 – W G Cox
8 – DK Geelan	11 – F Ferraro
14 – M Hoggan	16 – A Lambkin
47 – B & R Cherry	50 – D & M Bridge
53 – K & J Badior	54 – G Holmes
62 – D Moran	63 – J & M Moore
91 – T & D Olofsson	95 – J & T Clarke
105 – J & G McInerney	161 – V Lopes
111 – T Burgess	112 – S & C Ernst

Note: To identify the locations referred to in Table 6, see the figures in Appendix 5.

Table 7: Additional noise mitigation criteria dB(A)

Location	Day	Evening	Night
	$L_{Aeq}(15min)$	$L_{Aeq}(15min)$	$L_{Aeq}(15min)$
All privately-owned land in NAG 1	41	41	39
All privately-owned land in NAG 2	42	42	40
All privately-owned land in NAG 3	43	43	42
All privately-owned land in NAG 4	45	45	40
All privately-owned land in NAG 5	53	49	45
All privately-owned land in NAG 6	44	44	41
All privately-owned land in NAG 7	48	45	42
All privately-owned land in NAG 8	45	45	38
All privately-owned land in NAG 9	43	43	41
All privately-owned land in NAG 10	42	42	40
All privately-owned land in NAG 11	44	44	42
All privately-owned land in NAG 12	41	41	38
All privately-owned land in NAG A	42	42	39
All privately-owned land in NAG B	40	40	38
All privately-owned land in NAG C	40	40	38
All privately-owned land in NAG D	43	43	41
All privately-owned land in NAG F	43	43	43
All privately-owned land in NAG G	44	44	42
All other privately-owned land	38	38	38

Notes:

- To identify the locations referred to in Table 7, see the figures in Appendix 5;
- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy; and
- For these conditions to apply, the exceedances of the criteria must be systemic.

- If the cumulative noise generated by the projects combined with the noise generated by other mines in the area exceeds the criteria at any residence on the land referred to in Table 8, then upon receiving a written request from the owner, the Proponent shall implement additional noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. These measures must be reasonable and feasible. The Proponent shall share the costs associated with implementing these measures on as equitable basis as possible with the relevant mines.

If within 3 months of receiving this request from the owner, the Proponent 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 Director-General for resolution.

Table 8: Cumulative Noise Mitigation Criteria dB(A) L_{Aeq} (period)

Location	Day	Evening	Night
NAGs 4, 5, 8 and 9	57	47	42
All other privately owned land	52	47	42

Notes:

- To identify the locations referred to in Table 8, see the figures in Appendix 5;
- Cumulative noise is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy; and
- For these conditions to apply, the exceedances of the criteria must be systemic.

Rail Noise

- The Proponent shall seek to ensure that its rail spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with noise limits L6.1 to L6.4 in RailCorp's EPL (No. 12208) and ARTC's EPL (No. 3142) or a Pollution Control Approval issued under the former *Pollution Control Act 1970*.

Operating Conditions

9. The Proponent shall:
- implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the operational, low frequency, and rail noise generated by the projects;
 - regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this approval; and
 - co-ordinate the noise management on site with the noise management at nearby mines to minimise the cumulative noise impacts of the mines, to the satisfaction of the Director-General.

Noise Management Plan

10. The Proponent shall prepare and implement a Noise Management Plan for the projects to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with DECCW, and submitted to the Director-General for approval by the end of March 2011;
 - describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system that employs both reactive and proactive mitigation measures;
 - include a noise monitoring program that:
 - uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the projects; and
 - includes a protocol for determining exceedances of the relevant conditions of this approval;
 - include a protocol that has been prepared in consultation with the owners of the nearby mines to minimise the cumulative noise impacts of the mines.

BLASTING

Blasting Criteria

11. The Proponent shall ensure that the blasting on site does not cause exceedances of the criteria in Table 9.

Table 9: Blasting Criteria

Receiver	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (ppv(mm/s))	Allowable Exceedance
Residence on privately-owned land	115	5	5% of the total number of blasts over a period of 12 months
	120	10	0%
Main Northern Railway culverts and bridges	-	25	0%
All public infrastructure	-	50	0%

However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner or infrastructure owner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

Blasting Hours

12. The Proponent shall only carry out blasting on site between 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Director-General.

Blasting Frequency

13. The Proponent shall not carry out more than:
- 1 blast a day in the northern mining area unless an additional blast is required following a blast misfire;
 - 2 blasts a day in the existing Camberwell south pit, and then 1 blast a day when the mining moves from this pit into the western mining area unless an additional blast is required following a blast misfire; and
 - 10 blasts a week on site, averaged over any 12 month period.

Property Inspections

14. If the Proponent receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pits on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the Proponent shall:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General to:
 - establish the baseline condition of the buildings and/or structures on the land or update the previous property inspection report; and
 - identify any measures that should be implemented to minimise the potential blasting impacts of the projects on these buildings and/or structures; and
 - (b) give the landowner a copy of the new or updated property inspection report.

Property Investigations

15. If any landowner of privately-owned land within 2 kilometres of any approved open cut mining pit on site claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this request the Proponent shall:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to investigate the claim; and
 - (b) give the landowner a copy of the property investigation report.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Director-General.

If the Proponent or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution.

Operating Conditions

16. The Proponent shall:
- (a) implement best blasting management practice on site to:
 - protect the safety of people and livestock in the surrounding area;
 - protect private or public property in the surrounding area;
 - minimise the dust and fume emissions of the blasting; and
 - (b) co-ordinate the blasting on site with the blasting at nearby mines to minimise the cumulative blasting impacts of the mines;
 - (c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Director-General.
17. The Proponent shall not undertake blasting within 500 metres of:
- (a) Middle Falbrook Road or Stony Creek Road without the approval of Council;
 - (b) the New England Highway without the approval of the RTA; and
 - (c) the Main Northern Railway without the approval of the ARTC.
18. The Proponent shall not carry out blasting in the northern or western mining areas that is within 500 metres of any privately-owned land or land not owned by the Proponent unless:
- (a) the Proponent has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Proponent has advised the Department in writing of the terms of this agreement; or
 - (b) the Proponent has:
 - demonstrated to the satisfaction of the Director-General that the blasting can be carried out without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and
 - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land.

Blast Management Plan

19. The Proponent shall prepare and implement a Blast Management Plan for the open cut mining operations on site to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, and submitted to the Director-General for approval by the end of March 2011;
 - (b) describe the blast mitigation measures that would be implemented to ensure compliance with the relevant condition of this approval;

- (c) describe the measures that would be implemented to ensure that the public can get up-to-date information on the proposed blasting schedule on site;
- (d) include a blast monitoring program to evaluate the performance of the project; and
- (e) include a protocol that has been prepared in consultation with the owners of the nearby mines for minimising and managing the cumulative blasting impacts of the mines.

AIR QUALITY & GREENHOUSE GAS

Odour

20. The Proponent shall not ensure that no offensive odours are emitted from the site, as defined under the POEO Act.

Greenhouse Gas Emissions

21. The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Director-General.

Air Quality Criteria

22. Except for the air quality-affected land referred to in Table 1, the Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the projects do not exceed the criteria listed in Tables 10, 11 or 12 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 10: Long term criteria for particulate matter

Pollutant	Averaging Period	^d Criterion
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 11: Short term criterion for particulate matter

Pollutant	Averaging Period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 12: Long term criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 10–12:

- ^a Total impact (i.e. incremental increase in concentrations due to the projects plus background concentrations due to all other sources);
- ^b Incremental impact (i.e. incremental increase in concentrations due to the projects on their own);
- ^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.
- ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Director-General in consultation with DECCW.

Air Quality Acquisition Criteria

23. If particulate matter emissions generated by the projects exceed the criteria in Tables 13, 14 or 15 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner the Proponent shall acquire the land in accordance with the procedures in Conditions 6-7 of Schedule 4.

Table 13: Long term acquisition criteria for particulate matter

Pollutant	Averaging Period	^d Criterion
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 14: Short term acquisition criteria for particulate matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 150 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³

Table 15: Long term acquisition criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 13–15:

- ^a Total impact (i.e. incremental increase in concentrations due to the projects plus background concentrations due to all other sources);
- ^b Incremental impact (i.e. incremental increase in concentrations due to the projects on their own);
- ^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.
- ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Director-General in consultation with DECCW.

Additional Dust Mitigation Measures

24. Upon receiving a written request from the owner of any residence:
- on the air quality-affected land listed in Table 1; or
 - on the land listed in Table 16; or
 - on privately-owned land where subsequent air quality monitoring shows the dust generated by the projects is greater than or equal to the applicable criteria in Tables 10, 11 or 12 on a systemic basis, the Proponent shall implement additional dust mitigation measures (such as a first flush roof system, internal or external air filters, and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible.

If within 3 months of receiving this request from the owner, the Proponent 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 Director-General for resolution.

Table 16: Land subject to dust mitigation on request

88 – M & T De Jong	106 – B & R Richards
110 – G J Hall	111 – T Burgess
112 – S & C Ernst	

Note: To identify the locations referred to in Table 16, see the applicable figures in Appendix 5.

Operating Conditions

25. The Proponent shall:
- implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the projects;
 - minimise any visible air pollution generated by the projects;

- (c) regularly assess the real-time air quality monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval; and
- (d) co-ordinate air quality management on site with the air quality management at the nearby mines to minimise the cumulative air quality impacts of the mines, to the satisfaction of the Director-General.

Air Quality & Greenhouse Gas Management Plan

26. The Proponent shall prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the Integra mine complex to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, and submitted to the Director-General for approval by the end of March 2011;
 - (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time air quality management system that employs proactive and reactive mitigation measures;
 - (c) describe in detail the specific measures that would be implemented to minimise the dust impacts on the Dulwich property while it remains in private ownership;
 - (d) include an air quality monitoring program that:
 - uses a combination of real-time monitors, high volume samplers and dust deposition gauges to minimise the air quality impacts of the projects on site, and evaluate the performance of these projects; and
 - includes a protocol for determining exceedances with the relevant conditions of this approval.
 - (e) include a protocol that has been prepared in consultation with the owners of the adjoining mines for minimising and managing the potential cumulative air quality impacts of the projects on site when combined with the air quality generated by other mines in the area.

METEOROLOGICAL MONITORING

27. During the life of the project, the Proponent shall 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 of Air Pollutants in New South Wales* guideline; and
 - (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*.

SUBSIDENCE

Performance Measures

28. The Proponent shall ensure that the underground project does not cause any exceedance of the performance measures in Table 17.

Table 17: Subsidence Performance Measures

Water	
Glennies Creek alluvial aquifer	Negligible impact
Natural watercourses on site	No greater environmental consequences than predicted in the Underground Project EA
Xstrata Mt Owen Bettys Creek Diversions	No greater than the environmental consequences predicted in the Underground Project EA, unless the owner agrees otherwise in writing
Underground Project Creek Diversions	Remain hydraulically and geomorphologically stable
Other water storages and drainage lines	No greater than the environmental consequences predicted in the Underground Project EA
Biodiversity	
Threatened species, populations, habitat or ecological communities	Negligible impact
Built Features	
All built features, including the Main Northern Railway Line, Glennies Creek Power Station and Mt Owen Rail Spur	Safe, serviceable and repairable, unless the owner agrees otherwise in writing
Public Safety	
Public Safety	No additional risk due to mining

Note: These subsidence impact performance measures should be read in conjunction with the conditions relating to rehabilitation at the end of this Schedule.

First Workings

29. The Proponent shall not carry out first workings on site that are inconsistent with the approved mine plans without the written approval of the Director-General.

Extraction Plan

30. The Proponent shall prepare and implement an Extraction Plan for all second workings on site to the satisfaction of the Director-General. This plan must:
- (a) be prepared a team of suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
 - (b) be approved by the Director-General before the Proponent undertakes any second workings covered by the plan;
 - (c) include detailed plans of the proposed second workings and any associated surface development;
 - (d) include detailed performance indicators for each of the performance measures in Table 17;
 - (e) describe the measures that would be implemented to ensure compliance with the performance measures in Table 17, and remediate any predicted subsidence impacts and/or environmental consequences;
 - (f) provide revised predictions of the conventional and non-conventional subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this approval, that specifically addresses the incremental and cumulative subsidence effects and impacts of multi-seam mining;
 - (g) include the following to the satisfaction of I&I NSW:
 - a subsidence monitoring program to:
 - provide data to assist in the management of the risks associated with subsidence;
 - validate the subsidence predictions; and
 - analyse the relationship between the subsidence effects and impacts under the Extraction Plan and any ensuing environmental consequences;
 - a Built Features Management Plan, which has been prepared in consultation with the owners of such features, to manage the potential impacts and consequences of subsidence on any built features;
 - a Public Safety Management Plan to ensure public safety in the underground project area;
 - a revised Rehabilitation Management Plan;
 - (h) include:
 - a revised Water Management Plan, which has been prepared in consultation with DECCW and NOW, to manage the potential impacts and consequences of subsidence on surface water and groundwater resources, flooding and existing and proposed creek diversions;
 - a revised Biodiversity Management Plan, which has been prepared in consultation with DECCW, to manage the potential impacts and consequences of subsidence on biodiversity;
 - a Land Management Plan, which has been prepared in consultation with relevant landowners, to manage the potential impacts and consequences of subsidence on land in general;
 - a revised Heritage Management Plan to manage the potential impacts and consequences of subsidence on heritage sites or values; and
 - a program to collect sufficient baseline data for future Extraction Plans.

This condition does not apply to any second workings that are covered by an existing Subsidence Management Plan approval at the date of this approval.

Payment of Reasonable Costs

31. The Proponent shall pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent persons (if required) to review the adequacy of any aspect of the Extraction Plan.

SOIL & WATER

Water Supply

32. The Proponent shall ensure that it has sufficient water for all stages of the projects, and if necessary, adjust the scale of mining operations to match its water supply.

Note: The Proponent is required to obtain the necessary water licences for the projects under the Water Act 1912 and/or Water Management Act 2000.

Baseflow Offsets

33. The Proponent shall offset the loss of any baseflow to the surrounding watercourses and/or associated creeks caused by the projects to the satisfaction of the Director-General.

Notes:

- This condition does not apply in the case of losses of baseflow which are negligible.
- Offsets should be provided via the retirement of adequate water entitlements to account for the loss attributable to the projects.
- The Proponent is not required to provide additional baseflow offsets where such offsets have already been provided under previous consents or approvals for the projects. These existing offsets are to be described and evaluated in the Surface and Ground Water Response Plan (see below).

Compensatory Water Supply

34. The Proponent shall provide compensatory water supply to any landowner of privately-owned land whose water entitlements are impacted (other than an impact that is negligible) as a result of the projects, in consultation with NOW, and to the satisfaction of the Director-General.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply must be provided (at least on an interim basis) within 24 hours of the loss being identified.

If the Proponent and the landowner 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 Director-General for resolution.

If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Director-General.

Surface Water Discharges

35. The Proponent shall ensure that all surface water discharges from the site comply with the:
- (a) discharge limits (both volume and quality) set for the projects in any EPL; or
 - (b) relevant provisions of the POEO Act or *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

Glennies Creek and Station Creek Alluvial Aquifers

36. The Proponent shall not undertake any open cut mining operations within 150 metres of the Glennies Creek alluvial aquifer or Station Creek alluvial aquifer without the prior written approval of the Director-General. In seeking this approval, the Proponent must consult with NOW and demonstrate to the satisfaction of the Director-General that adequate safeguards have been incorporated into the Surface and Groundwater Response Plan (see below) to minimise, prevent and/or adequately offset groundwater leakage from the alluvial aquifers.

Notes: The alluvial aquifers and 150 metre buffer zones are shown conceptually on the figure in Appendix 7. This condition does not restrict the Proponent's right to construct and use water management works, access tracks, environmental bunds, remediation works and other similar works.

Creek Diversions for the Underground Project

37. The Proponent shall carry out the proposed diversions of Bettys Creek and Main Creek in the underground project area to the satisfaction of the Director-General.
38. Within 6 months of completing the construction of the diversions, the Proponent shall submit an as-executed report, certified by a practising engineer, to the Director-General and NOW.

Note: The objective of the report is to confirm that the diversions are sufficiently hydraulically and geomorphologically stable.

Xstrata Mt Owen Bettys Creek Diversions

39. The Proponent shall:
- (a) commission a suitably qualified and independent expert, whose appointment has been approved by the Director-General, to carry out a detailed survey of geotechnical, geomorphic and ecological baseline condition of the Xstrata Mt Owen Bettys Creek Diversions:
 - prior to carrying out any second workings under the creek diversions; and
 - within 6 months of completing the second workings under these creek diversions; and
 - (b) provide a copy of these surveys to the Department within a month of the completion of each survey.

Water Management Plan

40. The Proponent shall prepare and implement a Water Management Plan for the projects to the satisfaction of the Director-General. This plan must be prepared in consultation with DECCW, NOW and I&I NSW, and submitted to the Director-General for approval by the end of June 2011.

In addition to the standard requirements for management plans (see Condition 2 of Schedule 5), this plan must include:

- (a) a Site Water Balance, which must:
 - include details of:
 - sources and security of water supply;
 - water use on site;
 - water management on site; and
 - any off-site water transfers, and
 - describe what measures would be implemented to minimise clean water use on site;
- (b) a Creek Diversion Management Plan for the proposed creek diversions in the underground project area, which must:
 - be consistent with any related requirements in future Extraction Plan(s); and
 - include:
 - a vision statement for the creek relocations;
 - an assessment of the water quality, ecological, hydrological and geomorphic baseline conditions within each creek;
 - the detailed design specifications for the creek relocations;
 - a construction program for the creek relocations, describing how the work would be staged, and integrated with mining operations;
 - a revegetation program for the relocated creeks using a range of suitable native species;
 - water quality, ecological, hydrological and geomorphic performance and completion criteria for the creek relocations based on the assessment of baseline conditions; and
 - a program to monitor and maintain the water quality, ecological, hydrological and geomorphic integrity of the creek diversions;
- (c) an Erosion and Sediment Control Plan, which must:
 - identify activities that could cause soil erosion and generate sediment;
 - describe measures to minimise soil erosion and the potential transport of sediment to downstream waters;
 - describe the location, function and capacity of erosion and sediment control structures; and
 - describe what measures would be implemented to maintain these structures for the life of the projects;
- (d) a Surface Water Management Plan, which must include:
 - detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the projects;
 - surface water impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts from the projects;
 - a program to monitor and assess surface water flows and quality, impacts on water users and stream health;
- (e) a Groundwater Management Plan, which must include:
 - detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, which could be affected by the projects;
 - groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater water impacts from the projects; and
 - a program to monitor and assess:
 - groundwater inflows to the open cut mining operations; and
 - impacts of the projects on the region's aquifers, any groundwater bores and surrounding watercourses, in particular Glennies Creek and Station Creek and adjacent alluvium; and

- (f) a Surface and Groundwater Response Plan, which must include:
- a response protocol for any exceedances of the surface water and groundwater assessment criteria;
 - measures to offset the loss of any baseflow to watercourses caused by the projects;
 - measures to compensate landowners of privately-owned land whose water supply is adversely affected by the projects; and
 - measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

BIODIVERSITY

Biodiversity Offset

41. The Proponent shall implement the offset strategy summarised in Table 18, described in the open cut and underground project EAs, and shown conceptually in the figure in Appendix 8 to the satisfaction of the Director-General.

Table 18: Biodiversity Offset Strategy for the Integra Mine Complex

Offset Areas	Minimum Size
Northern Offset Area	121 hectares
Southern Offset Area	39 hectares
Western Offset Area	94 hectares
Supplementary Offset Area	33 hectares
Bridgman Offset Area	86 hectares

42. By the end of June 2011, unless the Director-General agrees otherwise, the Proponent shall revise the offset strategy referred to above, in consultation with DECCW, and to the satisfaction of the Director-General. The revised offset strategy must:
- ensure provision of at least 140 hectares of Narrow-leafed Ironbark-Spotted Gum-Forest Red Gum Forest (or a suitable equivalent) to further offset the impact of the open cut project; and
 - include an additional 6 hectares of Central Hunter Swamp Oak Forest (or a suitable equivalent) to offset the impact of the underground project on the Glendell Biodiversity Offset Area.

Long Term Security of Offsets

43. By the end of December 2011, the Proponent shall make suitable arrangements to provide appropriate long term security for all the areas in the revised offset strategy to the satisfaction of the Director-General.

Biodiversity Management Plan

44. The Proponent shall prepare and implement a Biodiversity Management Plan for the projects to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with DECCW, and submitted to the Director-General for approval by the end of December 2011;
 - describe how the implementation of the offset strategy would be integrated with the overall rehabilitation of the site (see below);
 - include:
 - a description of the short, medium, and long term measures that would be implemented to:
 - implement the offset strategy; and
 - manage the remnant vegetation and habitat, both on site and in the offset areas;
 - detailed performance and completion criteria for the implementation of the offset strategy;
 - a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - implementing revegetation and regeneration within the offset areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
 - maximising salvage and beneficial use of resources in areas that are to be impacted, including vegetative, soil and cultural heritage resources;
 - protecting vegetation and soil outside the areas to be impacted;
 - rehabilitating Bettys Creek and Main Creek;
 - managing salinity;
 - conserving and reusing topsoil;
 - undertaking pre-clearance surveys;
 - managing impacts on fauna;
 - landscaping the site to minimise visual impacts;

- collecting and propagating seed;
- salvaging and reusing material from the site for habitat enhancement;
- controlling weeds and feral pests, including terrestrial and aquatic species;
- managing grazing and agriculture on site and in the biodiversity offset areas;
- controlling access;
- bushfire management; and
- managing potential conflicts between the offset areas and Aboriginal cultural heritage values;
- a description of the potential risks to the successful implementation of the biodiversity offset strategy, and a description of the contingency measures that would be implemented to mitigate these risks;
- a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria; and
- details of who would be responsible for monitoring, reviewing, and implementing the plan.

Conservation Bond

45. Within 6 months of the approval of the Biodiversity Management Plan (see above), the Proponent shall lodge a conservation bond with the Department to ensure that the offset strategy 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 offset strategy; and
- (b) employing a suitably qualified quantity surveyor to verify the calculated costs.

If the offset strategy is implemented to the satisfaction of the Director-General, the Director-General will release the bond. If the offset strategy is not implemented to the satisfaction of the Director-General, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory implementation of the strategy.

With the agreement of the Director-General, this bond may be combined with the rehabilitation securities administered by the Minister for Mineral Resources.

HERITAGE

Further Archaeological Investigation

46. Prior to carrying out any development in the parts of the site outlined in purple on the figure in Appendix 8, unless the Director-General agrees otherwise, the Proponent shall carry out further archaeological testing and investigation within the broader area outlined in purple on the figure in Appendix 8 to the satisfaction of the Director-General.

Heritage Management Plan

47. The Proponent shall prepare and implement a Heritage Management Plan for the projects to the satisfaction of the Director-General. This plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
 - (b) be prepared in consultation with DECCW, the Aboriginal community, the Heritage Branch, Council, local historical organisations and any relevant landowners;
 - (c) be submitted to the Director-General for approval by the end of March 2011;
 - (d) include programs/procedures for the following in relation to Aboriginal heritage management on site:
 - recording, salvaging and/or managing all Aboriginal sites, objects and deposits that are to be destroyed within the open cut project area;
 - conserving, managing and monitoring all Aboriginal sites, objects and deposits that are to be protected within the open cut project area, including the 3 scarred trees identified within the western mining area;
 - maintaining and managing access to Aboriginal sites, objects and deposits by the Aboriginal community, including provision of an appropriate Keeping Place;
 - managing the discovery of any new Aboriginal objects or skeletal remains identified during the projects; and
 - ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal cultural heritage values on the site.
 - (e) include programs/ procedures for the following, in accordance with the applicable guidelines of the Heritage Branch:

- further historical investigation of the area outlined in purple on the figure in Appendix 8 to identify the potential archaeological resources within the area,;
- archaeological testing of the potential archaeological resources within the area outlined in purple on the figure in Appendix 8;
- further archaeological investigation of any areas where the archaeological testing (referred to above) identifies significant archaeological deposits;
- archaeological excavation of the known grave on site, identified as the James Halliday Glennie grave site;
- detailed archival recording of the Dulwich property if it is to be mined, or the preparation of a detailed conservation management plan for the Dulwich property if it is not to be mined (subject to the agreement of the landowner);
- archival recording of any other heritage items to be destroyed by the project;
- conserving, managing, monitoring, and where appropriate, relocating any non-Aboriginal sites, objects and deposits on the site;
- interpreting the findings of the additional heritage or archaeological investigations carried out on the site; and
- managing the discovery of any new non-Aboriginal objects or skeletal remains identified during the projects.

TRANSPORT

Coal Transport

48. By the end of December 2011, the Proponent shall cease truck haulage of ROM coal from the underground surface facilities to the CHPP, and transport such coal only via overland conveyor, except in an emergency situation and with the prior written approval of the Director-General.

Monitoring of Coal Transport

49. The Proponent shall:
- (a) keep accurate records of:
 - amount of coal transported from the site (on a monthly basis);
 - the date and time of each train movement from the site; and
 - (b) make these records publicly available on its website at the end of each calendar year.

Road and Intersection Upgrade Works

50. The Proponent shall design and construct the Middle Falbrook Road intersection to the reasonable satisfaction of Council prior to commencing construction activities that require access from Middle Falbrook Road to the site.

VISUAL

Visual Amenity and Lighting

51. The Proponent shall:
- (a) minimise the visual impacts, and particularly the off-site lighting impacts, of the projects;
 - (b) take all practicable measures to further mitigate off-site lighting impacts from the projects; and
 - (c) ensure that all external lighting associated with the Integra mine complex complies with *Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting*, or its latest version, to the satisfaction of the Director-General.

Additional Visual Mitigation Measures

52. Upon receiving a written request from the owner of any residence on privately-owned land which has significant direct views of the mining operations on site, the Proponent shall implement additional visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed towards minimising the visibility of the mining operations from the residence.

If within 3 months of receiving this request from the owner, the Proponent 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 Director-General for resolution.

WASTE

53. The Proponent shall:
- minimise the waste generated by the projects; and
 - ensure that the waste generated by the projects is appropriately stored, handled, and disposed of, to the satisfaction of the Director-General.
54. The Proponent shall prepare and implement a Waste Management Plan for the projects to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with I&I NSW, and submitted the Director-General for approval by the end of March 2011;
 - identify the various waste streams of the projects;
 - estimate the volumes of tailings and reject material that would be generated by the projects;
 - describe and justify the proposed strategy for disposing of this waste material;
 - describe what measures would be implemented to meet the requirements set out above; and
 - include a program to monitor the effectiveness of these measures.

BUSHFIRE MANAGEMENT

55. The Proponent shall:
- ensure that the Integra mine complex is suitably equipped to respond to fires on site; and
 - assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

REHABILITATION

Rehabilitation Objectives

56. The Proponent shall rehabilitate the site to the satisfaction of the Director-General of I&I NSW. This rehabilitation must be generally consistent with both the rehabilitation strategy described in the open cut and underground project EAs – and depicted conceptually in the figure in Appendix 9 – and the objectives in Table 19.

Table 19: Rehabilitation Objectives

Area/Domain	Rehabilitation Objectives
Site (as a whole)	Safe, stable & non-polluting
Surface infrastructure	To be decommissioned and removed, unless the Director-General agrees otherwise
Other land affected by the projects	Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of: <ul style="list-style-type: none"> local native plant species (unless the Director-General agrees otherwise); and a landform consistent with the surrounding environment
Xstrata Mt Owen Bettys Creek Diversions	Rehabilitate to the same or better geotechnical, geomorphic and ecological condition as prior to mining, unless the owner agrees otherwise
Sections of Bettys Creek and Main Creek to be undermined	Hydraulically and geomorphologically stable, with diverse habitats and ecology
Underground Project Creek Diversions	Hydraulically and geomorphologically stable, with diverse habitats and ecology
Built features	Repair to pre-mining condition or equivalent unless: <ul style="list-style-type: none"> the owner agrees otherwise; or the damage is fully restored, repaired or compensated for under the <i>Mine Subsidence Compensation Act 1961</i>
Community	Minimise the adverse socio-economic effects associated with mine closure

Progressive Rehabilitation

57. The Proponent shall carry out rehabilitation of the site progressively, that is, as soon as reasonably practicable following the disturbance.

Rehabilitation Management Plan

58. The Proponent shall prepare and implement a Rehabilitation Management Plan for the Integra mine complex to the satisfaction of the Director-General of I&I NSW. This plan must:
- (a) be prepared in consultation with the Department, DEECW, NOW, Council and the CCC;
 - (b) be prepared in accordance with any relevant I&I NSW guideline;
 - (c) build, to the maximum extent practicable, on the other management plans required under this approval; and
 - (d) be submitted to the Director-General of I&I NSW for approval by the end of June 2011.
-

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. By the end of December 2010, the Proponent shall:
 - (a) notify in writing the owners of:
 - the land listed in Table 1 of Schedule 3 that they have the right to require the Proponent to acquire their land at certain stages during the projects;
 - any residence on the land listed in Table 1 (noise-affected) or Table 6 of Schedule 3 that they are entitled to ask for additional noise mitigation to be installed at their residence at certain stages during the projects;
 - any residence on the land listed in Table 1 (air quality-affected) or Table 16 of Schedule 3 that they are entitled to ask for additional air quality mitigation measures to be installed at their residence at certain stages of the projects; and
 - any privately-owned land within 2 kilometres of any approved open cut mining pit on site that they are entitled to ask 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; and
 - (b) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the open cut or underground project EAs identify that the dust emissions from the projects are likely to be greater than the relevant air quality criteria in Schedule 3 at some stage during the projects.
2. Within 2 weeks of obtaining monitoring results showing:
 - (a) an exceedance of the relevant criteria in Schedule 3, the Proponent shall notify the affected landowner and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the projects are complying with the relevant criteria again;
 - (b) an exceedance of the relevant criteria in Conditions 6(c) or 7 of Schedule 3, the Proponent shall notify the applicable owner in writing that they are entitled to ask for additional noise mitigation to be installed at their residence;
 - (c) an exceedance of the relevant criteria in Conditions 22, 23 of Schedule 3, the Proponent shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land); and
 - (d) an exceedance of the relevant criteria in Condition 24(c) of Schedule 3, the Proponent shall notify the applicable owner of any residences on the land that they are entitled to ask for additional air quality mitigation measures to be installed at their residence.

INDEPENDENT REVIEW

3. If an owner of privately-owned land considers the projects to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the impact of the projects on his/her land.

If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision the Proponent shall:

 - (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:
 - consult with the landowner to determine his/her concerns;
 - conduct monitoring to determine whether the projects are complying with the relevant criteria in Schedule 3; and
 - if the projects are not complying with these criteria then:
 - determine if more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land;
 - identify the measures that could be implemented to ensure compliance with the relevant criteria; and
 - (b) give the Director-General and landowner a copy of the independent review.
4. If the independent review determines that the projects are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

If the independent review determines that the projects are not complying with the relevant criteria in Schedule 3, and that the projects are primarily responsible for this non-compliance, then the Proponent shall:

- (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until there is compliance with the relevant criteria; or
- (b) secure a written agreement with the landowner to allow the exceedances of the relevant criteria, to the satisfaction of the Director-General.

If the independent review determines that the projects are not complying with the relevant acquisition criteria in Schedule 3, and that the projects are primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in Conditions 6-7 below.

5. If the independent review determines that the relevant criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the Proponent shall:
 - (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until there is compliance with the relevant criteria; or
 - (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Director-General.

If the independent review determines that relevant acquisition criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for the exceedance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s in accordance with the procedures in Conditions 6-7 below.

LAND ACQUISITION

6. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall 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 projects, having regard to the:
 - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - presence of improvements on the land and/or any approved building or structure which has been physically commenced on the land 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 any additional mitigation measures required under Conditions 6,7 or 24 of Schedule 3;
 - (b) the reasonable costs associated with:
 - relocating within the Singleton or Muswellbrook local government areas, or to any other local government area determined by the Director-General; and
 - obtaining 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.

However, if at the end of this period, the Proponent 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 Director-General for resolution.

Upon receiving such a request, the Director-General will request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to:

- consider submissions from both parties;
- 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 paragraphs (a)-(c) above;
- prepare a detailed report setting out the reasons for any determination; and
- provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Director-General 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 Director-General will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report disputing the independent valuer's determination, and any other relevant submissions.

Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.

If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Director-General determines otherwise.

7. The Proponent shall pay all reasonable costs associated with the land acquisition process described in Condition 6 above, 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.
-

SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent shall prepare and implement an Environmental Management Strategy for the projects to the satisfaction of the Director-General. This strategy must:
 - (a) be submitted to the Director-General for approval by the end of March 2011;
 - (b) provide the strategic framework for the environmental management of the projects;
 - (c) identify the statutory approvals that apply to the projects;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the projects;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the projects;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the projects;
 - respond to any non-compliance; and
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this approval; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.

Management Plan Requirements

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the projects or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the projects; and
 - effectiveness of any management measures (see (c) above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;
 - (f) a program to investigate and implement ways to improve the environmental performance of the projects over time;
 - (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with the conditions of this approval and statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
 - (h) a protocol for periodic review of the plan.

Note: The Director-General may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

3. By the end of March 2012, and annually thereafter, the Proponent shall review the environmental performance of the projects to the satisfaction of the Director-General. This review must:
 - (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the projects over the past year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and

- relevant predictions in the documents referred to in Conditions 2 or 3 of Schedule 2;
- (c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
- (d) identify any trends in the monitoring data over the life of the projects;
- (e) identify any discrepancies between the predicted and actual impacts of the projects, and analyse the potential cause of any significant discrepancies; and
- (f) describe what measure will be implemented over the next year to improve the environmental performance of the projects.

Revision of Strategies, Plans & Programs

4. Within 3 months of:
 - (a) the submission of an annual review under Condition 3 above;
 - (b) the submission of an incident report under Condition 6 below;
 - (c) the submission of an audit report under Condition 8 below, or
 - (d) any modification of the conditions of this approval (unless the conditions require otherwise),
 the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.

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

Community Consultative Committee

5. The Proponent shall establish and operate a new Community Consultative Committee (CCC) for the projects in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), and to the satisfaction of the Director-General. This CCC must be operating by the end of March 2011.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval;*
- *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community;*
- *The new CCC may be comprised of members of the existing CCCs for the Integra mine complex at the date of this approval; and*
- *Prior to March 2011, the responsibilities of the CCC under this approval may be exercised by the existing CCCs for the Integra mine complex.*

REPORTING

Incident Reporting

6. The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the projects as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.

Regular Reporting

7. The Proponent shall provide regular reporting on the environmental performance of the projects on its website, in accordance with the reporting arrangements in any approved plans or programs of the conditions of this approval.

INDEPENDENT ENVIRONMENTAL AUDIT

8. By the end of December 2011, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the projects. This audit must:
 - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the projects and whether they are complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate

- (e) recommend measures or actions to improve the environmental performance of the projects, and/or any strategy, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.

9. Within 6 weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

10. From the end of December 2010, the Proponent shall:

- (a) make copies of the following publicly available on its website:
- the documents referred to in Conditions 2 and 3 of Schedule 2;
 - all current statutory approvals for the projects;
 - all approved strategies, plans and programs required under the conditions of this approval;
 - the monitoring results of the projects, reported in accordance with the specifications in any conditions of this approval, or any approved plans or programs;
 - a complaints register, updated on a monthly basis;
 - minutes of CCC meetings;
 - the annual reviews of the projects;
 - any independent environmental audit of the projects, and the Proponent's response to the recommendations in any audit; and
 - any other matter required by the Director-General;
- (b) keep this information up-to-date, to the satisfaction of the Director-General.
-

**APPENDIX 1
SCHEDULE OF LAND**

Underground Project Area

Lot Number	Deposited Plan Number
8	6830
10	6830
11	6830
12	6830
13	6830
17	6830
21	6830
791	580967
792	586255
1	600327
2	600327
3	600327
4	600327
1	606344
2	606344
3	606344
4	606344
.	608457
	622070
710	624852
71	625171
1	626854
100	633743
1	655758
1	701939
2	701939
3	701939
1	745211
1	741653
PT79	752442
93	752442
2	752450
10	752450
64	752499
65	752499
66	752499
622	1097524
1	770733
2	770733
.	780607
	780607
1	781057
1	783398
532	788015
1	799154
332	832646
12	835203
921	844642
922	844642
923	844642
111	850054
112	850054
1	851867
2	851867
3	851867
4	851867
5	851867
6	851867
7	851867
8	851867
2	859544
3	859544
5	859544
6	859544
7	859544

Lot Number	Deposited Plan Number
8	859544
924	862883
925	862883
1	865784
Pt1	940619
1	998045
1	1009231
123	1067863
1	1083482
560	1104561
G	37613
1	113540
2	113540
1	246434
2	246434
4	246434
5	246434
6	246434
5	264089
1	597205
2	597205
1	628652
2	628652
	725247
1/4	729917
22	752442
91	752442
92	752442
2	752450
6	752450
10	752450
120	752450
43	752455
75	752455
77	752455
78	752455
98	752455
70	777661
1	802596
2	802596
1	810309
233	829334
235	829334
237	829334
239	829334
0	829334
12	855251
1	873260
2	873260
7	1075078
1	1083482
2	1083482
1	1111102
2	1111102
3	1111102
4	1111102
6	1111104
Access Road	
5	113540
32	752455
44	752455
45	752455
73	752455
74	752455
75	752455
76	752455
78	752455
86	752455
95	752455

Open Cut Project Area

Lot Number	Deposited Plan Number
1	264434
2	752450
44	752455
1/95	752455
G	37613
76	752455
98	752455
710	624852
2	1083482
6	246434
70	777661
3	752455
4	246434
1/100	633743
1	810309
1	212284
1	725247
233	829334
1/6	752450
2	246434
1/77	752455
	873260
1/45	752455
1	628652
2	113540
235	829334
1	802596
240	829334
2	597205
2	810309
2	810309
1/792	586255
1/32	752455
91	752442
92	752442
5	264089
1/73	752455
12	855251
237	829334
2	212284
1	752450
2	628652
1/239	829334
136	752455
1/791	580967
174	729917
51	551899
22	752442
5	246434
8	246434
1/4	113540
1/4	606344
231	829334
1	597205
1/213	106786
1/74	752455
2	802596
8	251618
1/93	752422
1/10	752450
75	752455
1/43	752455
7	113538
1/86	752455
1/1	783398
78	752455
1/120	752450
71	777661

Lot Number	Deposited Plan Number
1	113540
1	873260
1	1075078
1	1083482

APPENDIX 2 PREVIOUS EAS

Glennies Creek Colliery (105/90)

- Environmental Impact Statement (EIS) dated 20 August 1990 prepared by Dames & Moore in accordance with Section 77(3) of the Environmental Planning and Assessment Act, and certified by Warren Atkinson and supplementary information supplied by the Applicant to the Singleton Shire Council ("the Council") by letters dated 20 November 1990, 19 February 1991, submissions to Commission of Inquiry;
- The Statement of Environmental Effects in support of a Section 96(2) Application for the Glennies Creek Coal Mine, dated July 1998, prepared by R.W. Corkery and Co Pty Ltd;
- Statement of Environmental Effects in support of a Section 96(2) application for the Glennies Creek Coal Mine, dated June 2001, prepared by R.W. Corkery and Co Pty Ltd;
- The Statement of Environmental Effects in support of an application to Modify the Development Consent for the Glennies Creek Coal Mine, dated December 2001, prepared by Mr Bob Corbett, Manager – Environmental Services with AMCI Australia Pty Ltd; Letter from Bob Corbett to NPWS/PlanningNSW dated the 23 April 2002 regarding flora and fauna issues; Air Quality Impact Assessment: Glennies Creek Ventilation Shaft dated the 19 April 2002, prepared by Holmes Air Science; Letter from Bob Corbett to EPA/PlanningNSW dated the 15 May 2002 regarding additional information requested on air quality; and Archaeological Assessment prepared by John Appleton dated April 2002;
- The information provided in support of a Section 96(1A) application, dated January 2005, prepared by Glennies Creek Coal Management Pty Ltd; and the Statement of Environmental Effects in support on an application to modify the Development Consent for the Glennies Creek Colliery, dated November 2005, prepared by Glennies Creek Coal Management Pty Ltd; and
- The Statement of Environmental Effects prepared by Environmental Resources Management Pty Ltd dated May 2008 to support the Section 96(1A) application by Integra Coal Operations dated May 2008.

Camberwell Coal Project (86/2889)

- Camberwell Coal Project, Glennies Creek - Environmental Impact Statement, dated October, 1989, as modified by the works set out in figures 1 and 2 attached to the April 1992 Notice of Amendment;
- Camberwell Coal Pty Limited to the Singleton Shire Council letter dated 21 December, 1989 advising on rail facilities;
- Letter from Camberwell Coal Pty Limited to the Singleton Shire Council, dated 29 January, 5 February, 6 February, 1990;
- Responses to letters of objection submitted to Council by Camberwell Coal Pty Limited dated 25 January, 1990;
- Responses by Camberwell Coal Pty Limited to comments submitted by government bodies, dated 5 February, 1990;
- Statement of Environmental Effects in support of a Section 96(2) application for the Camberwell Coal Mine, dated 2 July 2001, prepared by HLA-Envirosciences Pty Ltd;
- Additional information provided by PJ Murray in response to submissions received on the proposal in a letter dated 29 August 2001;
- Information provided by Camberwell coal Pty Limited accompanying the application to modify development consent received 20 November 2003;
- Statement of Environmental Effects in support of a Section 96(2) application for the Camberwell Coal Mine, dated July 2004, prepared by David Lane Associates;
- Statement of Environmental Effects Coal Handling and Preparation Plant Upgrade Camberwell Coal Mine, dated 31 March 2005, prepared by HLA Envirosciences Pty Limited;
- Statement of Environmental Effects Coal Handling and Preparation Plant Workshop, dated 31 July 2006, prepared by Camberwell Coal Pty Limited;
- Environmental Assessment for the Proposed Modification of Development Consent DA 86/2889 Integra Open Cut Increase in Annual ROM (ROM) Coal Production from 3.8Mt to 4.5Mt, dated 29 February 2008, prepared by Integra Coal Operations Pty Ltd; and
- Statement of Environmental Effects titled Relocation of Explosives Magazine Compound and Reload Facilities, dated 22 March 2010, prepared by Integra Coal Operations Pty Limited.

Glennies Creek Colliery Surface Facilities (06_0057)

- Environmental Assessment titled Glennies Creek Colliery Environmental Assessment of Surface Facilities and Activities dated July 2006, and the associated response to submissions, titled Responses to Issues Raised in Submissions (Project Application 06_0057) dated 23 October 2006 prepared by Glennies Creek Coal Management Pty Ltd;
- Letter from the Proponent to the Department amending the project application, dated 3 October 2006;
- Modification application and supporting information titled Proposed Modifications to Forest Road Ventilation Shaft Area, dated October 2008; and
- Modification application and supporting information titled Supporting Information for a s75W Application to Modify Condition 16 of Schedule 3, Project Approval (PA) 06_0057 – Integra Coal Operations Pty Ltd, dated June 2009.

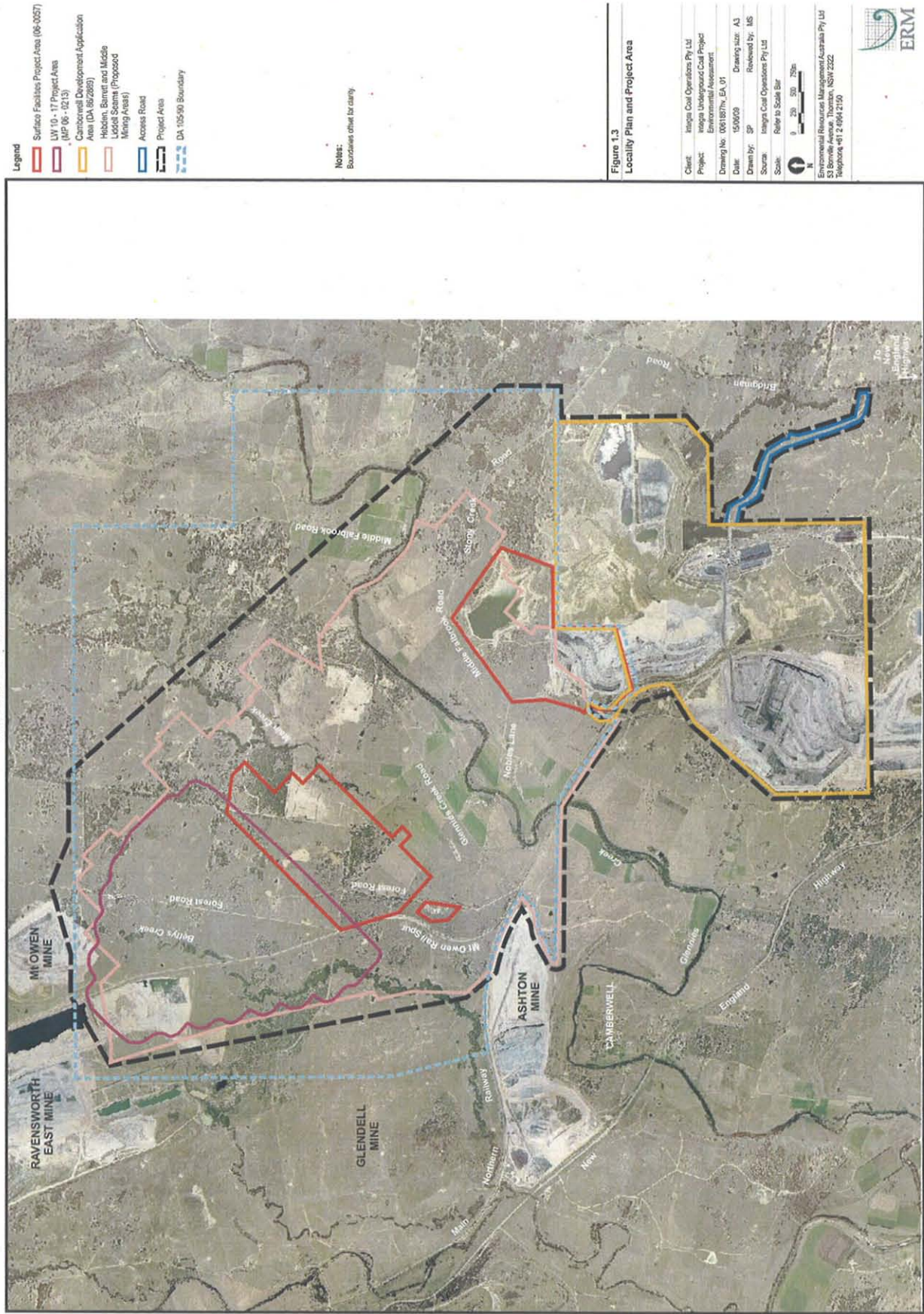
Glennies Creek Underground Coal Project (06_0213)

- Environmental Assessment titled Glennies Creek Colliery Longwalls 10 to 17 Part 3A Environmental Assessment for Integra Coal Operations Pty Limited dated 19 September 2007, and the associated response to submissions, titled Glennies Creek Part 3A Application – Longwall Panels 10-17 Middle Liddell Seam Response to Submissions, dated February 2008 prepared by Environmental Resources Management Australia Pty Ltd.

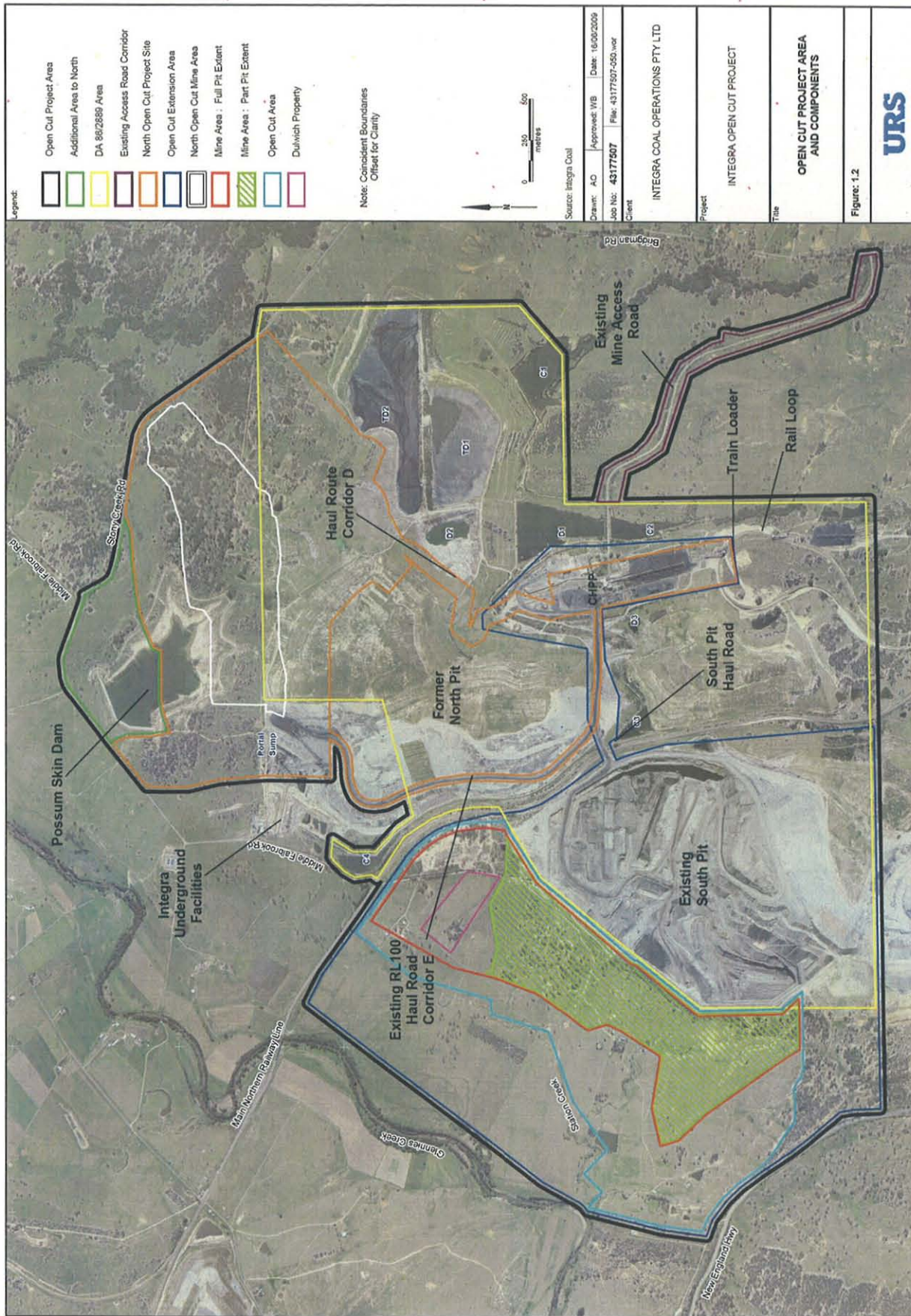
Glennies Creek Open Cut Coal Project (06_0073)

- Environmental Assessment titled Environmental Assessment Glennies Creek Open Cut Coal Mine, Volumes 1-3, dated October 2007, and the associated responses to submissions, titled Response to Government Agency Submissions Glennies Creek Open Cut Coal Mine, dated February 2008 and Supplementary Response to Government Agency Submissions Glennies Creek Open Cut Coal Mine, dated June 2008 prepared by RW Corkery & Co Pty Ltd.

APPENDIX 3 PROJECT AREAS

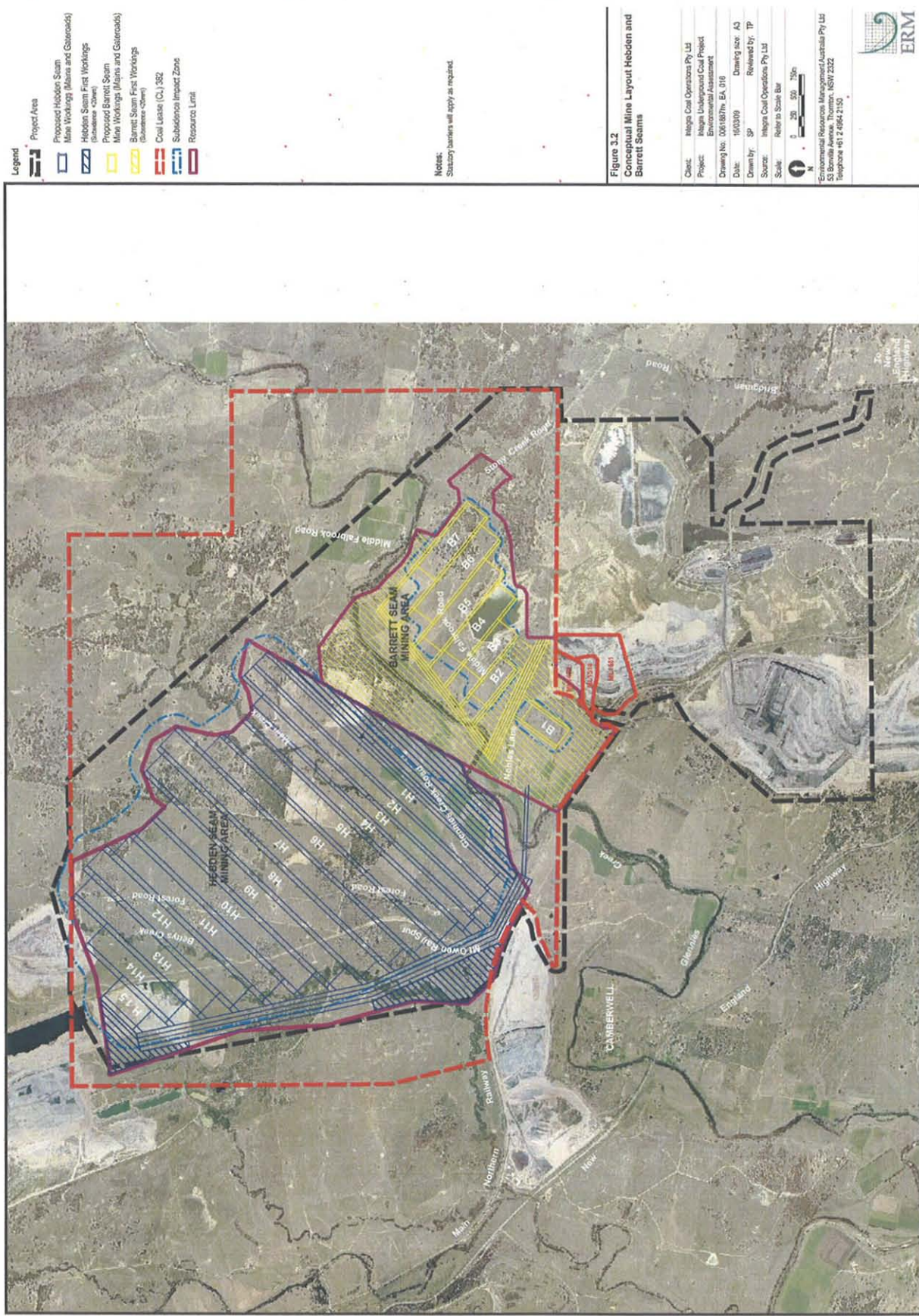


Underground Project Area



Open Cut Project Area

APPENDIX 4 PROJECT LAYOUT PLANS



Hebden and Barrett Mining Areas

- Legend**
- Project Area
 - Coal Lease (CL) 382
 - Middle Liddell Seam First Workings
 - Mining Area (Subsidence <20mm)
 - Future Approved Middle Liddell Seam Mine Workings
 - Existing Middle Liddell Seam Mine Workings

Notes:
 Stationary barriers will apply as required.

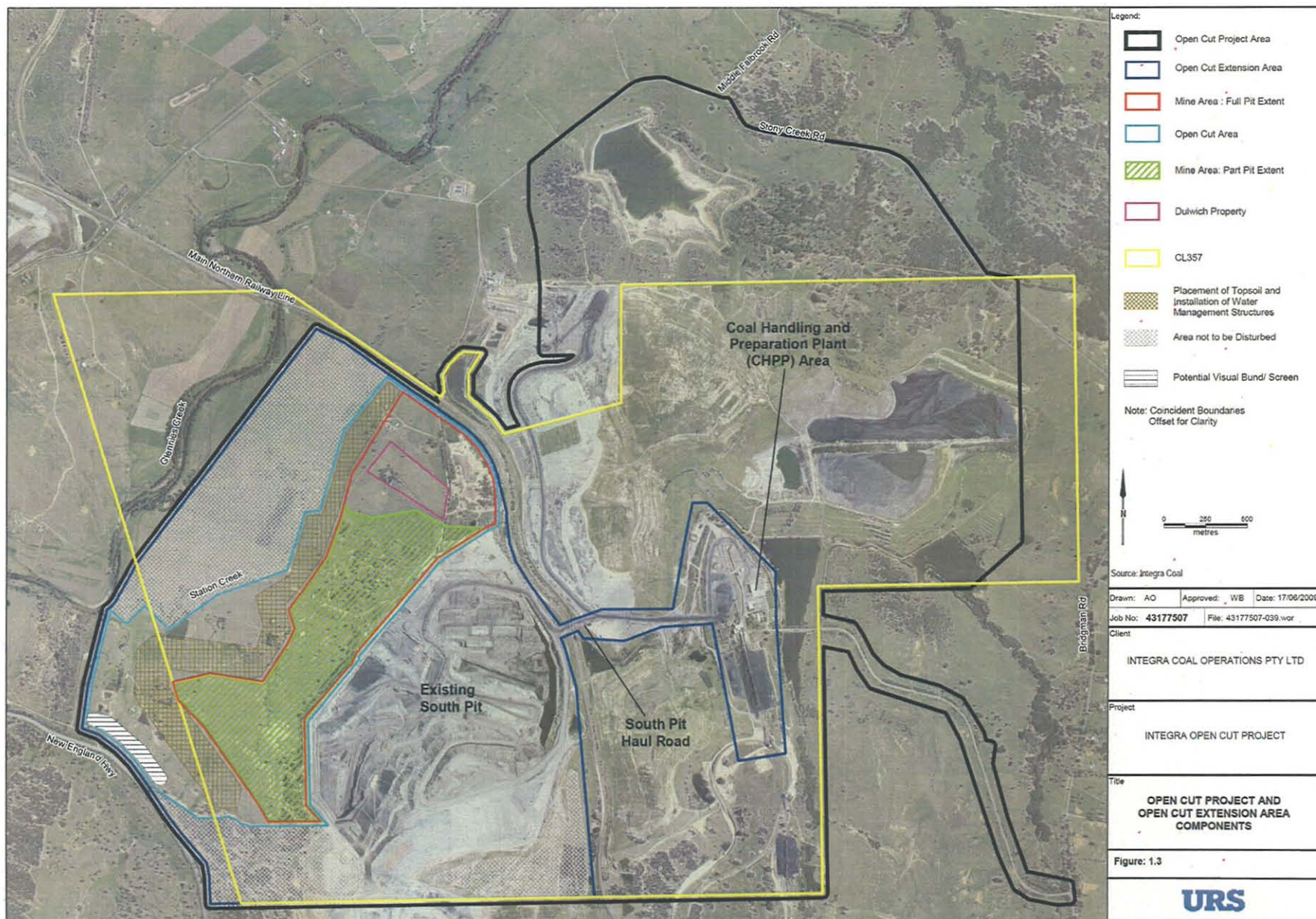
Figure 3.3
Conceptual Mine Layout Middle Liddell Seam First Workings Mining Area

Client:	Integral Coal Operations Pty Ltd
Project:	Integral Underground Coal Project
Environmental Assessment:	Environmental Assessment
Drawing No:	001187/1p EA 017
Date:	02/03/09
Drawn by:	SP
Reviewed by:	MS
Source:	Integral Coal Operations Pty Ltd
Scale:	Refer to Scale Bar
	0 250 500 750m

Environmental Resources Management Australia Pty Ltd
 53 Bonville Avenue, Thornton, NSW 2322
 Telephone +61 2 6964 2150

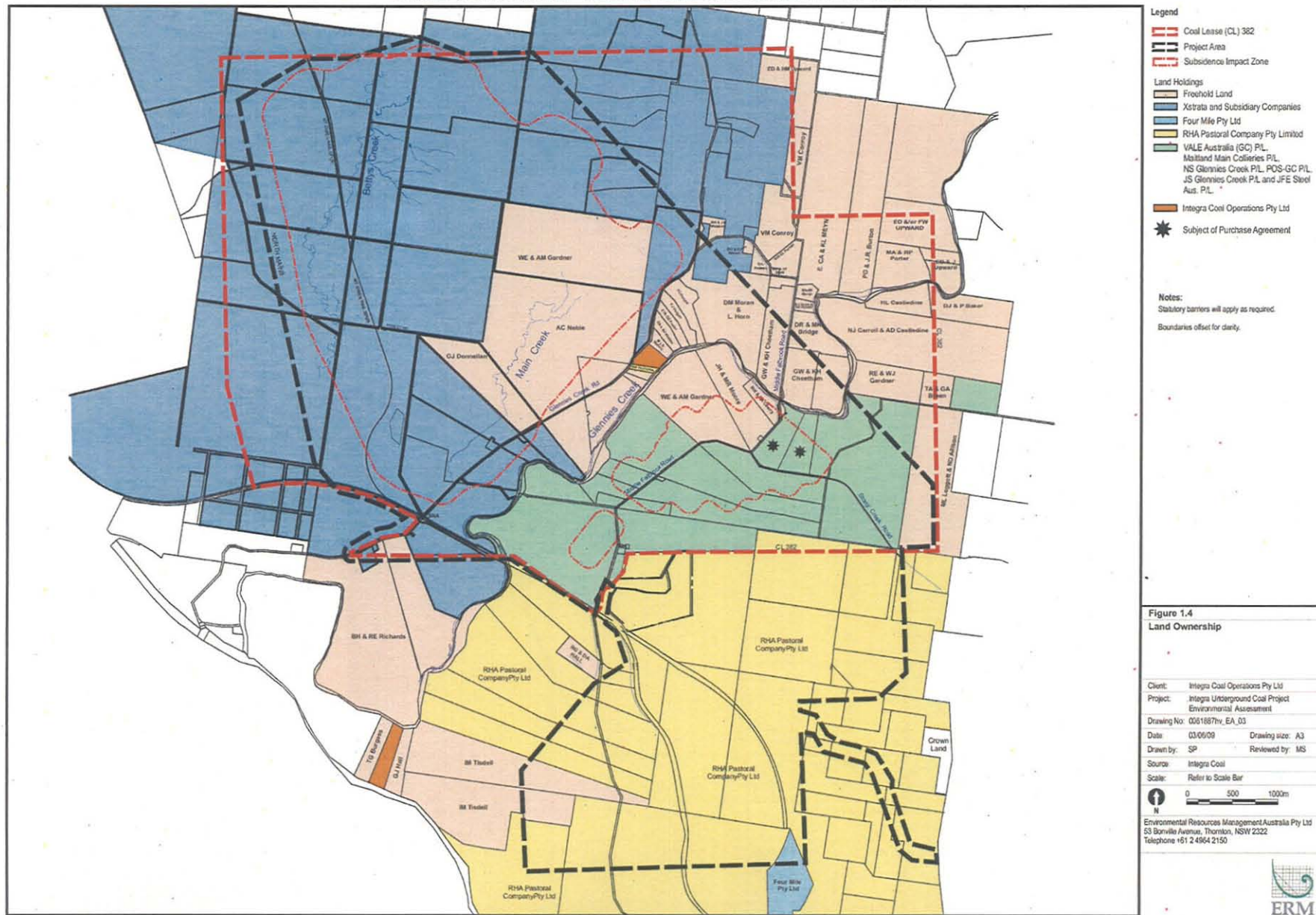


Middle Liddell Mining Areas

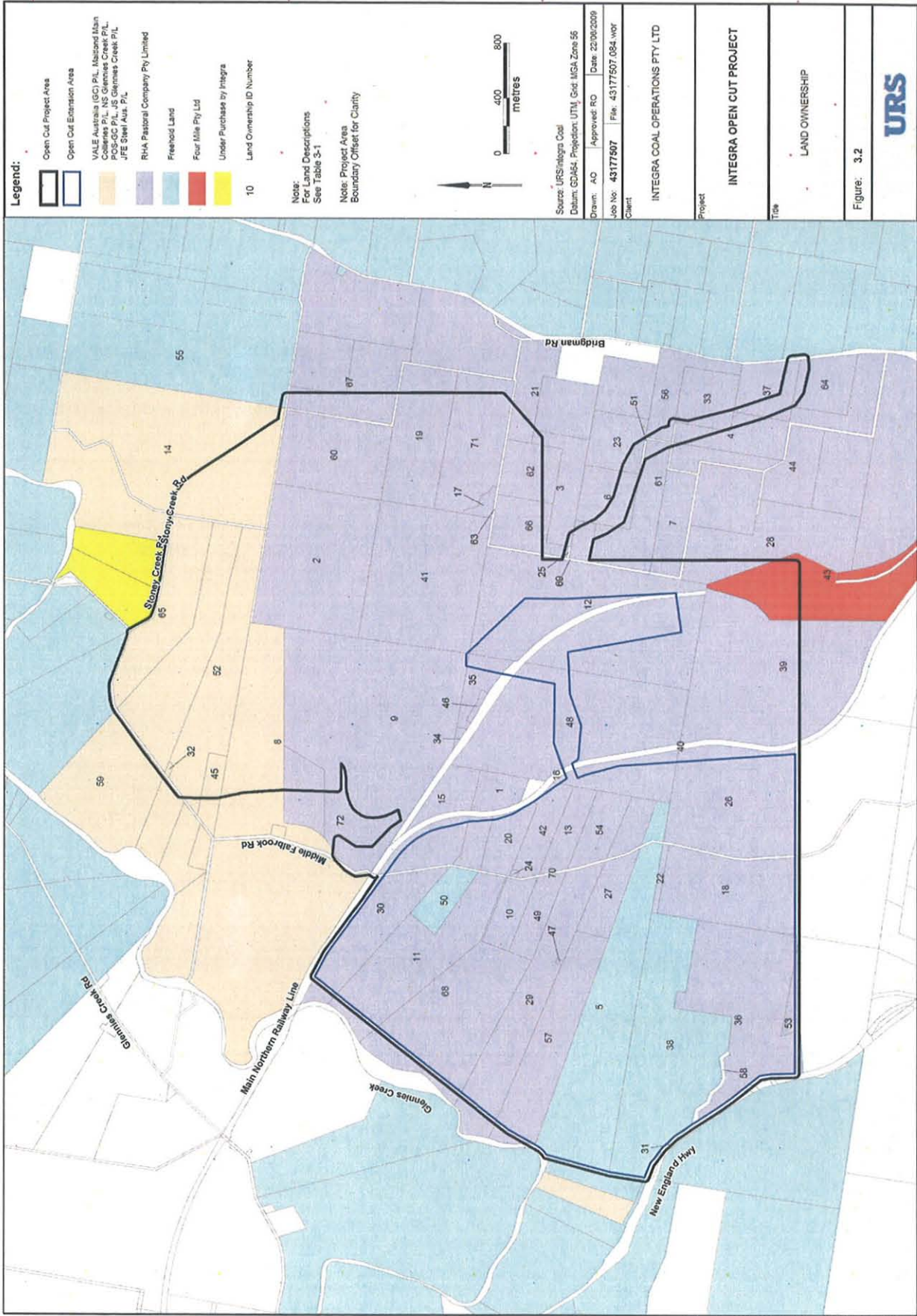


Western Mining Area and Surface Infrastructure

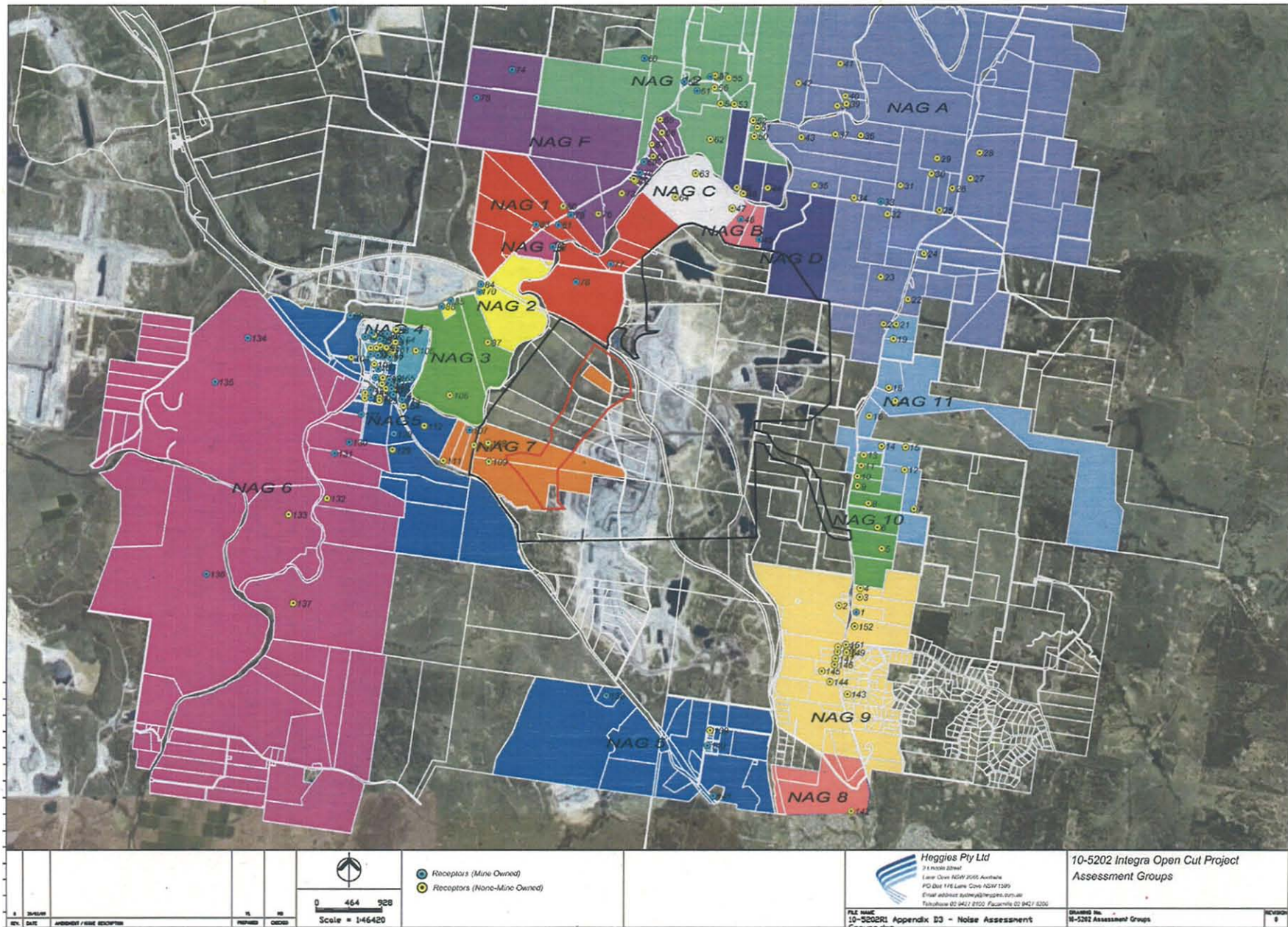
APPENDIX 5 LAND OWNERSHIP PLANS & RESIDENTIAL RECEIVERS



Underground Project Land Ownership (at time of EA production)



Open Cut Project Land Ownership (at time of EA production)



Residential Receivers

APPENDIX 6 ALTERNATE NOISE CONDITIONS

Acquisition on Request following Cessation of Open Cut Mining Operations

1. Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in Conditions 6-7 of Schedule 4.

Table 1: Land subject to acquisition upon request

Noise	Subsidence
80 – G Donnellan	47 – B & R Cherry
153 – R & D Hall	

Note: To identify the locations referred to in Table 1, see the figures in Appendix 5.

NOISE

Noise Criteria

2. Except for the noise-affected land referred to in Table 1, the Proponent shall ensure that the noise generated by the projects does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 2: Noise criteria dB(A)

		Day	Evening	Night	Night
		L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{A1} (1min)
NAG 1	All privately-owned land	38	38	36	46
NAG 2	All privately-owned land	39	39	37	47
NAG 3	87	42	42	42	49
	106	39	39	39	49
	All other privately-owned land	40	40	39	49
NAG 4	88, 91, 95, 99, 100, 105, 161	35	35	35	47
	All other privately-owned land	42	42	37	47
NAG 5	111	37	37	37	52
	112	36	36	36	52
	118	39	39	39	52
	154	36	36	36	52
	103, 104, 121, 139	35	35	35	52
	All other privately-owned land	50	46	42	52
NAG 6	132, 133, 137	35	35	35	48
	All other privately-owned land	41	41	38	48
NAG 7	110	38	38	38	49
	All other privately-owned land	45	42	39	49
NAG 8	142	35	35	35	45
	All other privately-owned land	42	42	35	45
NAG 9	2, 3, 4, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152	35	35	35	48
	All other privately-owned land	40	40	38	48
NAG 10	10	42	42	42	47
	9	41	41	41	47
	11, 13	40	40	40	47
	8	38	38	38	47
	6	36	36	36	47
	5	35	35	35	47

	All other privately-owned land	39	39	37	47
NAG 11	7, 12, 14, 15, 16, 17, 18	35	35	35	49
	All other privately-owned land	41	41	39	49
NAG 12	62	37	37	37	45
	50	36	36	36	45
	51, 52, 53, 54, 55, 56, 57	35	35	35	45
	All other privately-owned land	38	38	35	45
NAG A	22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43	35	35	35	46
	All other privately-owned land	39	39	36	46
NAG B	All privately-owned land	37	37	35	45
NAG C	47	36	36	36	45
	63	37	37	37	45
	64	38	38	38	45
	All other privately-owned land	37	37	35	45
NAG D	49	36	36	36	48
	44, 48	35	35	35	48
	All other privately-owned land	40	40	38	48
NAG F	67, 68	39	39	39	50
	65, 66	37	37	37	50
	All other privately-owned land	40	40	40	50
NAG G	All privately-owned land	41	41	39	50
	All other privately-owned land	35	35	35	45

Notes:

- To identify the locations referred to in Table 2, see the applicable figures in Appendix 5; and
- Noise generated by the projects is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

Additional Noise Mitigation Measures

3.

Table 6: Land subject to noise mitigation measures on request

9 – W & N Pendered	10 – E & B Kleinman
11 – F Ferraro	13 – P & K Russell
64 – W & A Gardner	87 – B & R Richards

Note: To identify the locations referred to in Table 6, see the applicable figures in Appendix 5.

APPENDIX 7 GLENNIES CREEK AND STATION CREEK ALLUVIAL AQUIFERS

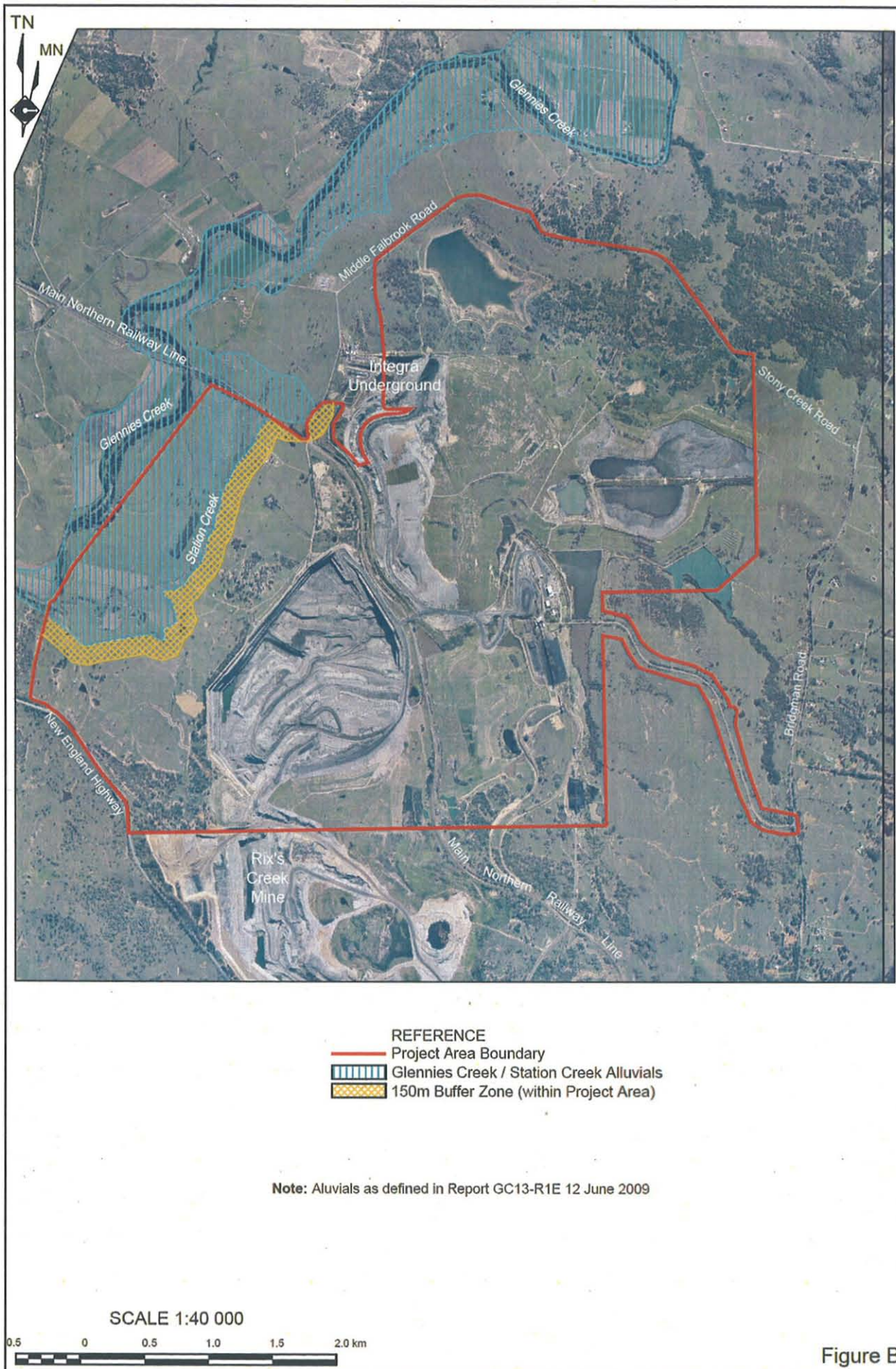
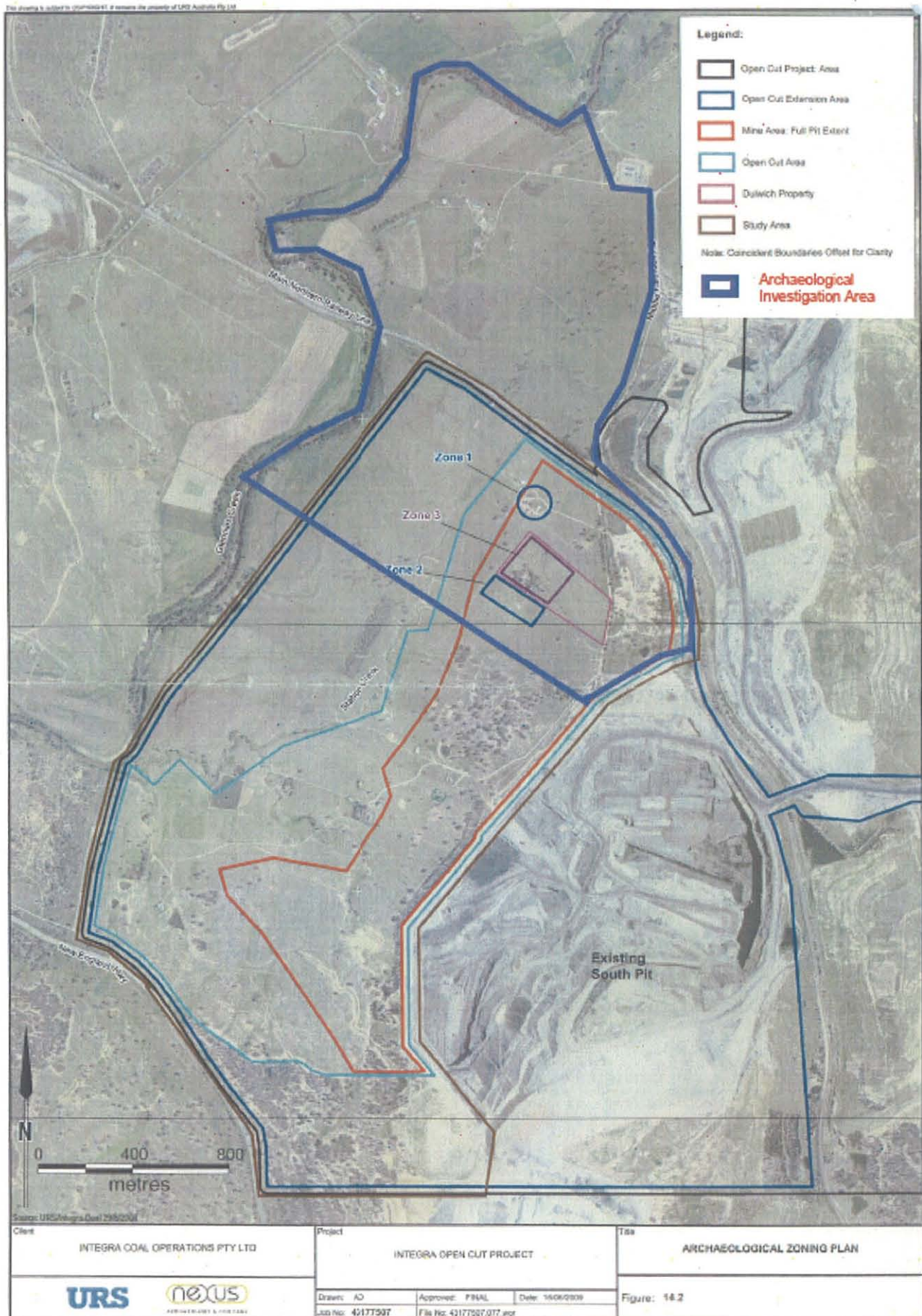
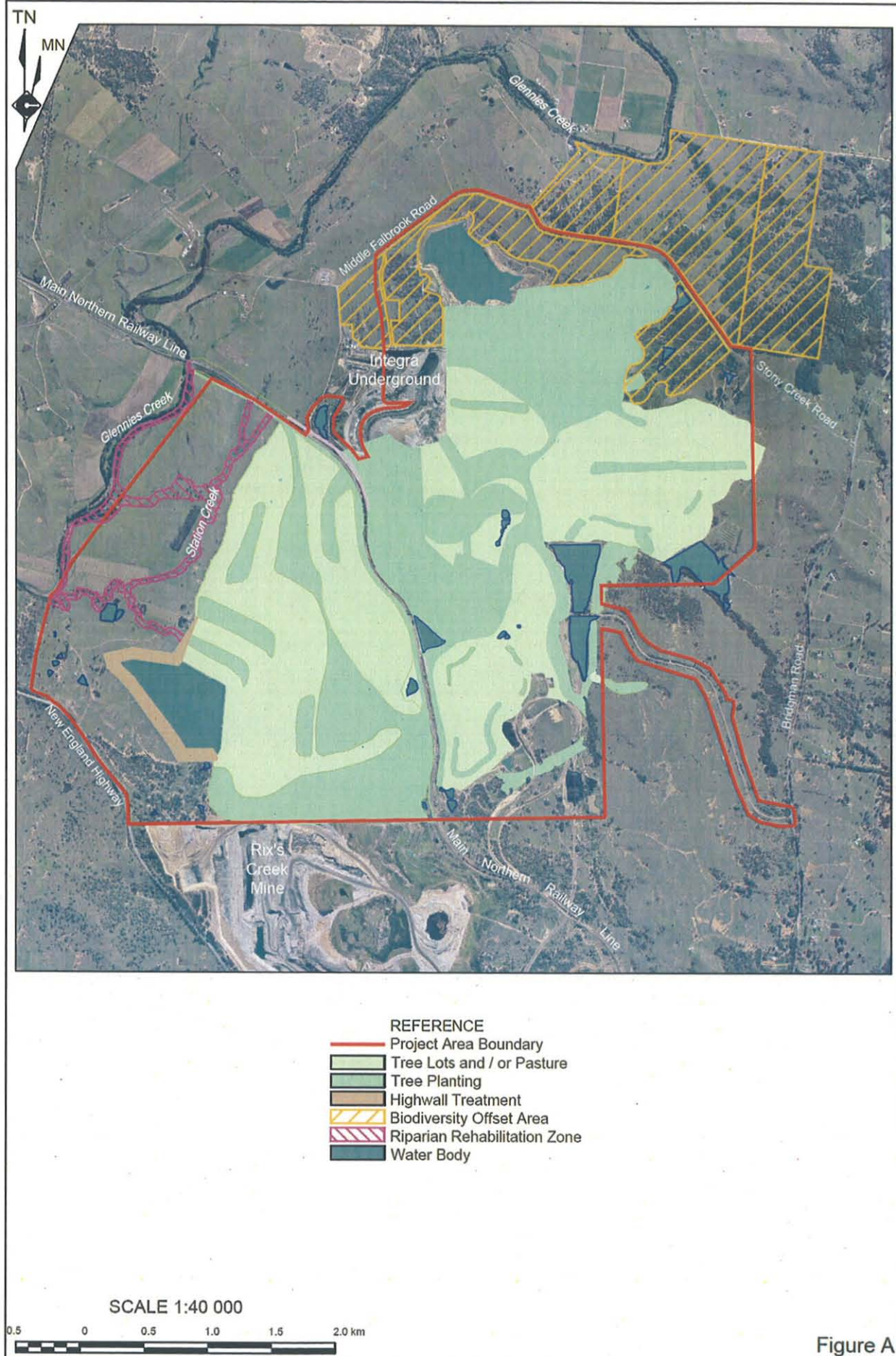


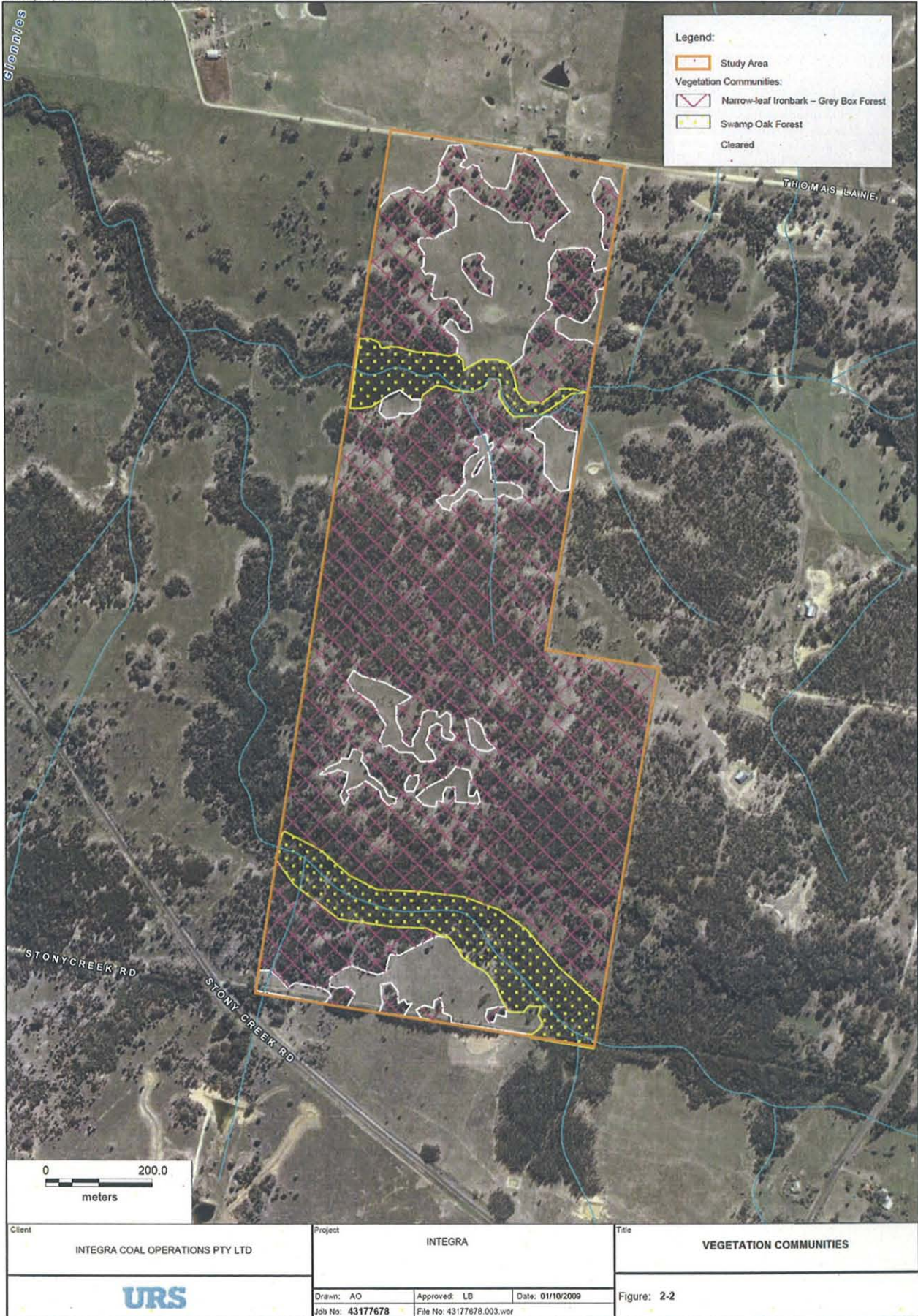
Figure B

APPENDIX 8 AREA FOR FURTHER ARCHAEOLOGICAL INVESTIGATION



APPENDIX 9 CONCEPTUAL FINAL LANDFORM AND OFFSETS







APPENDIX 10 STATEMENT OF COMMITMENTS

Underground Project Statement of Commitments

Desired Outcome	Existing or Proposed Actions	Timing
STATUTORY REQUIREMENTS		
Compliance with all conditional requirements in all approvals, licences and leases.	<ul style="list-style-type: none"> The development will be carried out as outlined in the following: <ul style="list-style-type: none"> this Environmental Assessment Report (EA); Project Approval; Environment Protection Licence; Subsidence Management Plans (SMPs); Mining Lease(s); and any other approvals, licences or leases. 	<ul style="list-style-type: none"> Continuous and as required.
All operations conducted in accordance with all relevant documentation.	<ul style="list-style-type: none"> Undertake all activities in accordance with the accepted Mining Operations Plan; environmental procedures; safety management plan and/or site-specific documentation in force at that time. 	<ul style="list-style-type: none"> Continuous and as required.
STAKEHOLDER CONSULTATION		
That effective communication/consultation is undertaken throughout the life of the Project.	<ul style="list-style-type: none"> Preparation of a community newsletter following Project Approval. Biannual meetings of the Community Consultative Committee. 	<ul style="list-style-type: none"> Within three months from the date of Project Approval. Continuous and as required.
	<ul style="list-style-type: none"> Ongoing communication with the management of Xstrata and provision of subsidence monitoring data. Conduct a more detailed assessment of the potential impacts of subsidence on items of Xstrata infrastructure. 	<ul style="list-style-type: none"> Continuous and as required. Prior to longwall mining under areas containing Xstrata owned infrastructure.
SUBSIDENCE		
Potential adverse impacts from subsidence are managed, monitored and remediated where necessary.		
<i>Subsidence management</i>	<ul style="list-style-type: none"> Subsidence Management Plan applications will be submitted to the DPI detailing strategies to manage subsidence impacts, inclusive of measures referenced in this EA. The mine plan for the Barrett seam longwall blocks will be developed and operated to provide a minimum 40 metre separation between the boundary to the connected alluvium and the 20mm subsidence line. In addition to the overarching SMPs, specific management plans will be developed which will address potential subsidence impacts on specific items or areas of sensitivity, roads and associated infrastructure, transmission lines, communication infrastructure, Bettys Creek, farm fences, farm buildings and farm dams. Subsidence monitoring involving cross lines, longitudinal lines and three dimensional surveying will be undertaken to confirm the levels of subsidence occurring and enable refinements to subsidence predictions. Temporary remediation works will progress during mining, with permanent remediation works completed following full subsidence 	<ul style="list-style-type: none"> Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of longwall mining in the affected area and ongoing. Prior to the commencement of proposed longwall mining in the affected area. Prior to, during and after mining in the Barrett and Hebden Seams. Continuous and as required.

Desired Outcome	Existing or Proposed Actions	Timing
Management of subsidence impacts on surface infrastructure.	<ul style="list-style-type: none"> impacts in an area. The new Forest Road Subsidence Management Plan to be built upon the existing management plan to reflect the expected subsidence and associated impacts. As part of Hebden SMP development, a management plan for Glennies Creek Road and associated infrastructure will be prepared. As part of Barrett SMP development, a management plan for Middle Falbrook Road and associated infrastructure will be prepared. Possum Skin Dam will be decommissioned. The current Electricity Transmission Lines Subsidence Management Plan will be revised for inclusion in the new SMPs and will detail management of subsidence effects on powerlines. The existing management plan for the Forest Road communications/Telstra line will be reviewed and updated in consultation with Telstra to reflect changes resulting from this proposal. Stakeholder consultation and monitoring of the existing communication cable adjacent to the Mt Owen Rail Spur will be carried out to ensure the cable remains serviceable during subsidence. Should XMO's mine plan change, any potential subsidence effects on its tailings dams or highwalls will be addressed in the relevant SMPs at that time. ICO will undertake a more detailed assessment of potential impacts on the Ravensworth East / XMO and Glendell Open Cuts. ICO will provide stakeholders such as Singleton Shire Council and landowners who border roads with a monthly update of the location of the longwall face relative to the road, and the estimated progress of the longwall during the following month. Signs will be erected by ICO at points on the road at the edge of the longwall subsidence impact zone. Approval will be sought from DPI and ARTC prior to any mining within the Main Northern Railway protection zone. Any proposed workings in the Main Northern Railway protection zone will be designed to be long term stable – taking site conditions into consideration A subsidence management plan will be devised in consultation with the MSB and the owners of houses above Barrett Seam Longwall 7. Surveys will be conducted prior to, during and after mining, to confirm the levels of subsidence movements and impacts, and identify if triggers for implementation of management measures have been reached. ICO and the MSB will undertake rebuilding, rectification of structural work, re-levelling and remedial work to surface water drainage and sewerage systems at the existing Glennies Creek Community Hall as required to remediate anticipated subsidence damage. 	<ul style="list-style-type: none"> Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of longwall mining which would potentially affect the stability or integrity of the dam wall. Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of proposed longwall mining in the affected area. As required. Prior to the commencement of proposed longwall mining in the affected area. Following finalisation of the surface mine layout and prior to mining within these areas. Monthly. Prior to the commencement of proposed longwall mining in the affected area. Prior to mining within the protection zone. Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of proposed longwall mining in the affected area. As required.

Desired Outcome	Existing or Proposed Actions	Timing
Ensure minimal subsidence impacts on natural features.	<ul style="list-style-type: none"> The Hebden SMPs to be developed will incorporate and build upon the existing Surface Drainage Management Plan. A Bettys Creek Diversion Management Plan will be prepared as part of the Hebden SMPs. <p>ICO will prepare:</p> <ul style="list-style-type: none"> a response strategy to address any destabilisation of Main Creek; a works programming for any necessary remedial works in Main Creek should subsidence expression initiate incision and headward erosion; an outline of expansion of piezometric monitoring; and a TARP as part of a surface water and groundwater monitoring and management program. 	<ul style="list-style-type: none"> Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of proposed longwall mining in the affected area. <p>Prior to Hebden Seam longwall mining undermining Man Creek.</p>
Ensure minimal subsidence impacts on farm infrastructure.	<ul style="list-style-type: none"> The Hebden SMPs and Barrett SMPs to be developed will incorporate and build upon the existing Farm Fences, Farm Buildings and Farm Dams Subsidence Management Plans, as appropriate. In consultation with the relevant landowner, ICO will remediate any dam that is damaged by subsidence (or has its storage capacity reduced by more than 10 percent) to a condition similar to that prior to subsidence. 	<ul style="list-style-type: none"> Prior to the commencement of proposed longwall mining in the affected area. As required.
ECOLOGY Operations are managed such that adverse impacts to native flora and fauna are prevented, minimised and/or offset.	<ul style="list-style-type: none"> ICO will implement the following flora and fauna management procedures. <ul style="list-style-type: none"> Revegetate the planned Bettys Creek diversion channel and adjacent areas; Undertake surveys along the creek diversion and revegetated areas to record any significant loss of planted seedlings and monitor the use of revegetated areas by native fauna. Revegetation design, weed management, exclusion of cattle and ongoing monitoring in the area of the Bettys Creek diversion will be coordinated in consultation with Glendell. The abandoned Bettys Creek channel will be managed (ie weed control and exclusion of cattle) in conjunction with the ongoing management and monitoring of the proposed diversion. Based on the ephemeral nature of the existing channel, consideration will be given to blocking off the abandoned channel at the downstream end to act as a billabong to retain any surface flows. Undertake pre-clearance inspections of borehole sites. Where possible, the inspections will be undertaken during the summer flowering period to optimise detection of <i>Bothriochloa biloba</i> and to avoid impacting directly on any individual plants. 	<ul style="list-style-type: none"> Continuous, as required.
HERITAGE Operations are managed such that adverse impacts to significant Aboriginal and Historical heritage items are	<ul style="list-style-type: none"> Artefact scatters (sites 37-3-0597, 37-3-0595 and 37-3-0027) that will be destroyed by the proposed Bettys Creek diversion will be salvaged and 	<ul style="list-style-type: none"> Prior to the diversion of Bettys Creek.

Desired Outcome	Existing or Proposed Actions	Timing
avoided, minimised and/or offset.	<p>involve the following.</p> <ul style="list-style-type: none"> • During clearing works in the areas where surface earthworks will occur, a qualified archaeologist will undertake field work with assistance from the Aboriginal community. • Artefacts will be recorded individually and, once any site is salvaged, all materials and list of details collected for each artefact will be provided to the Local Aboriginal Land Council. 	<ul style="list-style-type: none"> • During excavations works undertaken for the diversion of Bettys Creek. • Prior to the diversion of Main Creek.
	<ul style="list-style-type: none"> • Monitoring of excavation works along the banks of Bettys Creek will be undertaken by a representative of the Aboriginal community. • The area to be impacted by the realignment of Main Creek will be re-surveyed with the assistance of the local Aboriginal community and any sites fully recorded and logged prior to the confirmation of the channels' locations and designs. • Should the additional survey works in the area to be impacted by the realignment of Main Creek highlight any areas of high cultural or scientific significance, the alignment of the proposed works will be altered and / or subsurface investigations will be undertaken in consultation with DECC and DoP. 	<ul style="list-style-type: none"> • Prior to the diversion of Main Creek.
	<ul style="list-style-type: none"> • Sites 37-3-0682, 37-3-0683 and any additional sites recorded during the survey will be salvaged prior to construction commencing and all activities requiring soil removal associated with the realignment of Main Creek will be monitored by representatives of the Aboriginal community. The salvage will: <ul style="list-style-type: none"> • be undertaken by a qualified archaeologist during clearing works in the areas where surface earthworks will occur with assistance from the Aboriginal community; and • include recording of individual artefacts. Once any site is salvaged, all materials and list of details collected for each artefact will be provided to the Local Aboriginal Land Council. • Monitoring of excavation works along the banks of Main Creek will be undertaken by a representative of the Aboriginal community. • Infrastructure will be sited to avoid impacts to known heritage sites. Should impacts be unavoidable, DECC and the local Aboriginal community representatives will be consulted. • The Aboriginal community will be given the opportunity to collect any surface artefacts from the planned surface (remediation) activities. • In consultation with the local Aboriginal community, the existing Aboriginal Cultural Heritage Management Plan (ACHMP) will be revised and built upon to detail management of project induced effects. 	<ul style="list-style-type: none"> • Prior to the diversion of Main Creek • During excavations works undertaken for the diversion of Main Creek. • Continuous, as required.
	<ul style="list-style-type: none"> • The Aboriginal community will be given the opportunity to collect any surface artefacts from the planned surface (remediation) activities. • In consultation with the local Aboriginal community, the existing Aboriginal Cultural Heritage Management Plan (ACHMP) will be revised and built upon to detail management of project induced effects. 	<ul style="list-style-type: none"> • Prior to ground disturbing works in an area. • Prior to the commencement of ground disturbing works.
Ensure minimal subsidence impacts on archaeology.	<ul style="list-style-type: none"> • DECC and the Local Aboriginal Community Representatives will be consulted should there be impacts to potential Aboriginal deposits as a result of remediation works along creeks and works to rehabilitate cracks. • A qualified archaeologist will assess the potential impact of the planned works. • Should subsidence levels be greater than predicted, archaeological sub - 	<ul style="list-style-type: none"> • Prior to any remediation that may be required. • Prior to any subsidence remediation works. • As required.

Desired Outcome	Existing or Proposed Actions	Timing
	<p>surface testing may be undertaken in affected areas with the involvement of the Aboriginal stakeholders and DECC.</p> <ul style="list-style-type: none"> The Hebden SMPs to be developed will incorporate and build upon the existing Archaeology Subsidence Management Plan. 	<ul style="list-style-type: none"> Prior to the commencement of proposed longwall mining in the affected area.
SURFACE WATER Operations are managed such that adverse impacts to surface water are prevented, minimised and/or offset.	<ul style="list-style-type: none"> ICO will maintain the existing surface water monitoring program, and undertake additional monitoring including collection of grab samples during or immediately after surface runoff events along ephemeral watercourses; monthly water quality sampling of major water storages on the site; collection of data on water quantity and at least weekly collection of underground mine dewatering and raw water supply volume data. ICO will maintain a photographic record of the creeks and dam walls to determine historical (baseline) rates of erosion. As part of the erosion and flood studies, ICO will assess whether rapid changes in channel or floodplain form occur in the aftermath of runoff events. Monitoring results will be reported in the AEMR and distributed to the relevant Government agencies, CCC members and other relevant stakeholders. <p>ICO will prepare:</p> <ul style="list-style-type: none"> a response strategy to address any destabilisation of Main Creek; a works programming for any necessary remedial works in Main Creek should subsidence expression initiate incision and headward erosion; an outline of expansion of piezometric monitoring; and a TARP as part of a surface water and groundwater monitoring and management program. No impacts will occur to licensed water users, basic landholder rights or minimum baseflows in Glennies Creek regulated river or environmental water requirements. A Site Water Management Plan will be prepared outlining management measures associated with potential erosivity of the Bettys Creek diversion or degradation of Glennies Creek and any subsidence effects that may occur on the diversion or Glennies Creek and its associated alluvium. The mine plan will be developed and operated such that no detectable or measureable ingress of surface water into the mine workings will be generated that can't be reversed. Integra Coal will not restrict Xstrata Coal's ability to stabilise and reconfigure the diversion to Bettys Creek, and will develop an updated Site Water Management Plan to manage any adverse impacts from extraction of the Hebden Seam panels, including the collection of monitoring data by an independent consultant agreed to by ICO and Xstrata prior to the diversion being undermined. Integra Coal will provide evidence that their water accounting procedure 	<ul style="list-style-type: none"> Continuous, as required. Continuous, as required. Continuous, as required. Annually. <p>Prior to Hebden Seam longwall mining undermining Man Creek.</p> <ul style="list-style-type: none"> Continuous. Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of proposed longwall mining in the affected area. Prior to the commencement of proposed longwall mining in the affected area. Continuous, as required.

Desired Outcome	Existing or Proposed Actions	Timing
	<p>complies with dealings rules as prescribed under the Hunter Regulated River Water Sharing Plan (HRRWSP) and/or Hunter Unregulated River and Alluvium Water Sharing Plan (HURAWSP).</p> <ul style="list-style-type: none"> • Integra Coal will ensure it has sufficient water to meet mine operational demands in accordance with the statutory rules of the Hunter Regulated River Water Sharing Plan (HRRWSP) and/or Hunter Unregulated River and Alluvium Water Sharing Plan (HURAWSP), and any other statutory instruments in force under the Water Act 1912, and Water Management Act 2000. Should insufficient water be available to continue mining operations, mining operations will be scaled back to meet water supply requirements. • any proposed workings under Glennies Creek and its associated alluvium will be designed to be stable in the long term, taking site conditions into consideration 	<ul style="list-style-type: none"> • Continuous, as required.
<p>GROUNDWATER</p> <p>Operations are managed such that adverse impacts to local and regional groundwater resources are prevented, minimised and/or offset.</p>	<ul style="list-style-type: none"> • The current groundwater monitoring program will continue with ongoing review and possible modification of the program as further data is obtained and interpreted. Annual reports documenting and interpreting the collected data will be prepared. • Groundwater samples will be collected annually from selected piezometers and analysed at a NATA registered laboratory for major ions and selected metals. The groundwater program will be maintained in its current form, with a review of the program after interpretation of the first 12 months' data. • A private well monitoring program will be initiated to determine its pre mining yield if requested by a private bore owner. • Should a reduction in groundwater availability be detected, remedial action will be undertaken by Integra to offset the measured losses. Such actions may include digging the well deeper, installing a new well or installing a replacement bore. • Performance indicators will be identified and a statistical assessment will be undertaken to detect when, or if, a significant change has occurred in the groundwater system and to benchmark the natural variation in groundwater quality and standing water levels. • Contingency procedures will be developed. Activation of contingency procedures will be linked to the assessment of monitoring results. • Following the completion of extraction of each longwall panel, a report will be prepared that summarises relevant monitoring data. Relevant monitoring and management activities for each year will also be reported in the AEMR. 	<ul style="list-style-type: none"> • Continuous, as required. • Annually, as required. • 12 months prior to extraction of the Barrett Seam (subject to the timing of any request). • Subsequent to detecting a loss of groundwater availability due to mining. • Prior to longwall mining in the Hebden Seam. • As required. • Following the completion of extraction of each longwall panel and in the AEMR.

Desired Outcome	Existing or Proposed Actions	Timing
AIR QUALITY Operations are managed to minimise potential adverse impacts to the environment, residences and the community.	<ul style="list-style-type: none"> Implement the following air quality control procedures. Coal handling areas, stockpiles, roads and trafficked areas will be maintained in a moist condition using water carts and / or water sprays to minimise wind-blown and traffic-generated dust. Water sprays will be used at the longwall and development face to control particulates. All haul roads will have edges clearly defined with marker posts or equivalent to control their locations, especially when crossing large overburden emplacement areas. Obsolete roads will be ripped and re-vegetated; Development of minor roads will be limited and the locations of these will be clearly defined. Minor roads used regularly for access etc will be watered/treated to control dust. Due to OHS regulations regarding underground air quality, dust generated underground will be minimised. Currently this includes the application of water and/or use of dust suppressants. ICO will continue air monitoring in accordance with the Integra Underground EMS Procedure 002-2, Air Quality Monitoring Program, including monitoring weather conditions, TSP, PM₁₀ (using HVAS), real time PM₁₀ (using TEOM) and dust fallout. The results of the ongoing air quality monitoring program will be communicated to residents in the Local Community. 	<ul style="list-style-type: none"> Continuous, as required. Continuous. Continuous, as required.
GREENHOUSE GASES Manage operations such that greenhouse gas emissions on the environment are minimised and beneficial use of methane is maximised.	<ul style="list-style-type: none"> Fugitive methane emissions will be captured for energy generation where possible. If not feasible, flaring will be adopted, where practicable. Greenhouse gas emissions will be estimated and reported annually. Energy and greenhouse gas emission reduction initiatives will be implemented throughout the life of the development, including the following. <ul style="list-style-type: none"> The efficiency of all new and upgraded mobile and fixed equipment will be considered during procurement for fuel powered equipment. Ensuring equipment will be maintained to retain high levels of energy efficiency. The inventory of emissions developed for this environmental assessment will be maintained. Emissions and abatement strategies will be reported annually as part of the internal environmental reporting and National Greenhouse and Energy Reporting obligations and in the AEMR. 	<ul style="list-style-type: none"> Continuous. Following commencement of proposed mining. Continuous, as required.
NOISE AND VIBRATION Operations are managed to minimise potential adverse impacts on the environment, residences and the community.	<ul style="list-style-type: none"> ICO will implement the following noise management procedures and monitoring programs. 	<ul style="list-style-type: none"> Continuous, as required.

Desired Outcome	Existing or Proposed Actions	Timing
	<ul style="list-style-type: none"> • Use of conveyors instead of haul roads where approved. • Construction of acoustic bunds adjacent to haul roads where recommended by an acoustic consultant. • Use of routine monitoring results to refine on-site noise mitigation measures and operating procedures. • Undertake noise audits at boundary positions to static sources to verify potential change in overall sound emissions. • Undertake regular discussions with potentially affected residents to proactively identify noise related issues of concern. • Undertake quarterly monitoring at identified representative receivers. • Implement acoustic mitigation at residences where exceedances of the project specific criteria are demonstrated via the monitoring program and requested by the landowner. • Consideration of negotiated agreements with landowners where exceedances of the project specific criteria are substantiated by monitoring. • Informing residents that the existing community information line for Integra Underground would apply to this proposal. • Existing and / or additional real time noise monitoring will be utilised to manage, assess and control potential emissions from the Integra Open Cut and Underground operations. 	
	<ul style="list-style-type: none"> • A blast management protocol will be developed in conjunction with XMO to manage potential impacts from other mine's blasting on the underground mining activities. • Integra will investigate the feasibility of installing an overland conveyor to transport coal from the Integra Underground to the Integra CHPP and provide the outcomes of that investigation to the Director-General. 	<ul style="list-style-type: none"> • Prior to the commencement of proposed mining in the vicinity of open cut mining operations. • Prior to 30 June 2010
TRANSPORT		
Management of rail infrastructure.	<ul style="list-style-type: none"> • A new Mt Owen Rail Spur Management Plan will be prepared in consultation with XMO, and will include monitoring, stakeholder consultation and mitigation measures. 	<ul style="list-style-type: none"> • Prior to the commencement of proposed longwall mining in the affected area.
Management of roads.	<ul style="list-style-type: none"> • Current traffic and transport management measures will continue. In addition, linemarking of Stony Creek Road and Middle Falbrook Road will be undertaken if requested by Council. 	<ul style="list-style-type: none"> • Continuous.
WASTE		
Avoidance of unnecessary resource consumption; reuse, reprocessing, recycling and energy recovery wherever possible and, where this is not possible, disposal of wastes in an environmentally responsible manner.	<ul style="list-style-type: none"> • Wastes will continue to be managed in accordance with the Integra Underground Procedure PRO_0381 - Waste Management, including the following. <ul style="list-style-type: none"> • Reuse of mine water for dust suppression at the Integra Underground and Open Cut, in the CHPP and at neighbouring mines. • All waste oils will be pumped into on site storage tanks for subsequent transfer to a registered waste disposal company. • Old batteries will be stored in a designated bin prior to collection by a licensed contractor. • All scrap steel will be stored in dedicated skips and sold to scrap steel 	<ul style="list-style-type: none"> • Continuous, as required.

Desired Outcome	Existing or Proposed Actions	Timing
	<ul style="list-style-type: none"> merchants for recycling. Bulk chemical containers will be returned to suppliers for reuse as part of the supply agreement. Pallets will be collected by a recycling contractor. Colour-coded recycling containers will be placed in identified areas for collection of cardboard and paper products and collected regularly by licensed contractors / recyclers. Sewerage waste from site offices, administration building, maintenance areas and bath houses will be treated using an aerated wastewater treatment system before being discharged to an anaerobic and aerobic dam system. The water will then be irrigated onto adjacent land. Sludge from the aerated wastewater systems will be pumped out as required by contractors and disposed of to a licensed facility. Hazardous materials will be stored in accordance with Australian Standards. Old paints /preservatives, disused chemicals, solvents and coolants will be stored in allocated areas prior to being removed by a licensed hazardous waste contractor. Liquid waste from parts washers will be stored in 200L containers for removal by licensed waste contractors. Waste oil filters will be taken to a recycling facility by a registered waste disposal contractor. Materials containing liquids will be removed by a licensed contractor for recycling or disposal at a licensed waste management facility. Domestic wastes and maintenance consumables will be separated and collected by waste contractors. 	
REHABILITATION		
That effective rehabilitation is undertaken at the completion of mining.	<ul style="list-style-type: none"> Rehabilitation associated with proposed mining will be undertaken in accordance with the relevant MOP, REMP, Extraction Plans and SMPs. 	<ul style="list-style-type: none"> Following the completion of mining in the affected area.
SOCIO-ECONOMIC		
Net benefits of the proposal sufficiently outweigh potential adverse impacts.	<ul style="list-style-type: none"> A social impact monitoring strategy will be developed that quantifies the impacts on the local community and the effectiveness of strategies implemented in minimising these impacts. 	<ul style="list-style-type: none"> Following commencement of proposed longwall mining in the affected area.

Open Cut Project Statement of Commitments

Item	Mitigation Measure and Commitment	Implementation
General		
A1	Integra will comply with all conditional requirements in all approvals, licences and leases.	Throughout the life of the Project.
A2	Integra will conduct all operations in accordance with all relevant documentation including: <ul style="list-style-type: none"> Mining Operations Plan; environmental procedures; and safety management plans and/or site specific documentation. 	Continuous as required
Soils and Land Capability		
B1	Strip material to the depths stated in Table 6-3.	Continuous during operations
B2	Material will not be stripped in either extremely wet or dry conditions.	Continuous during operations

Item	Mitigation Measure and Commitment	Implementation
B3	Stripped material will be used immediately (where practicable) to avoid the requirement for stockpiling.	Continuous during operations
B4	Tracking over previously laid soil will be avoided to minimise compression effects.	Continuous during operations
B5	The surface of soil stockpiles will be left in as a coarsely textured a condition as possible to promote rainfall infiltration and minimise erosion.	Continuous during operations
B6	A maximum stockpile height of 3m will be maintained where practicable.	Continuous during operations
B7	Stockpiles will be positioned away from drainage lines and/or upslope water diversion banks or similar controls will be installed.	Continuous during operations
B8	Downslope sedimentation controls will be installed until the soil stockpiles are appropriately stabilised.	Continuous during operations
B9	If long-term stockpiling is planned (i.e. greater than 3 months), stockpiles will be seeded and fertilised as soon as possible.	Continuous during operations
B10	Prior to re-spreading stockpiled topsoil onto reshaped overburden, it will be decided if individual stockpiles require herbicide application and / or 'scalping' of weed species prior to topsoil spreading.	As required
B11	An inventory of available soil will be maintained to ensure adequate topsoil materials are available for planned rehabilitation activities.	Continuous during operations
B12	Topsoil will be spread to a nominal depth of 0.10m.	Continuous during operations
Groundwater		
C1	Standing water levels and groundwater quality will be assessed in accordance with Table 7.3 , Table 7.4 and Table 7.5 .	Continuous during and after operations
C2	All results will be reviewed and updated monitoring and remediation plans will be developed as required in consultation with DWE, DPI-MR and DECC.	Continuous during and after operations
C3	If required, contingency measures will be developed to manage any adverse impacts identified by monitoring that may indicate unanticipated effects in the groundwater system's response to mining in the proposed Pit.	Continuous during and after operations
C4	If the impacts of mining on the alluvium and Foybrook Formation groundwater systems are demonstrated to be greater than anticipated, Integra will: <ul style="list-style-type: none"> • assess the significance of these impacts; • investigate measures to minimise these impacts; and • describe what measures will be implemented to reduce, minimise, mitigate or remediate these impacts in the future to the satisfaction of the Director-General. 	Continuous during and after operations
C5	Rehabilitation of groundwater dependent ecosystems will be incorporated as part of the Offset Strategy (refer Commitment E10). Trigger thresholds for the groundwater management response will be identified and included in the Rehabilitation Strategy.	Continuous during and after operations
C6	The amount of water pumped into or out of the proposed Pit will be monitored to assess the actual volume of water stored within the pit as well as to assess the groundwater inflows and evaporation effects.	Continuous during operations
C7	All new bores will be installed by suitably licensed drillers after obtaining the relevant license from DWE.	Continuous during and after operations
C8	If monitoring results indicate the agreed standard or performance indicators are not being achieved, remedial actions will be implemented as appropriate.	Continuous during and after operations
C9	An annual report will be prepared by a qualified hydrogeologist and include a statistical analysis of the results of the parameters measured, an interpretation of water quality and standing water level changes.	Annually during and after operations
C10	All relevant monitoring and management activities for each year will be reported in the AEMR.	Annually
C11	ICO will adhere to the operating rules of the Hunter Regulated River Water Sharing Plan (HRRWSP) and the Hunter Unregulated River Water Sharing Plan (HURRWSP), thereby ensuring that the operation of the proposed extended Pit will protect Glennies Creek and its associated well connected alluvial water sources.	Continuous during and after operations
C12	Ongoing verification of the EA predictions and contingency measures will be attained by development and adherence to a surface water and groundwater monitoring and management plan (SW&GWMP) that will be prepared, in consultation with NOW. Cut off thresholds that relate to potential mining induced depressurisation impacts in the connected Glennies Creek Alluvium will be established and documented in the SW&GWMP.	Continuous during and after operations

Item	Mitigation Measure and Commitment	Implementation
C13	During excavation of the western periphery of the pit, geological mapping will be used to assess the potential southerly extension of a fault identified in the drift to the Integra Underground and, if identified, its significance. If the fault is present in the pit, it will be investigated to assess whether it can provide a connective hydrological pathway between the pit and the Glennies Creek alluvium through re-activation of the fault. If appropriate, the hydrological significance of the fault will be assessed through incorporating its hydrological properties into the existing FEFLOW groundwater model.	Continuous during operations
Surface Water		
D1	Construct diversions to direct clean water away from areas of disturbance, to a standard suitable to contain an ARI 50 year rainfall event.	Prior to and progressively during operations.
D2	Construct dirty water diversions to collect stormwater runoff from disturbed areas and deliver this water to sedimentation basins.	Prior to and progressively during operations.
D3	Construct sedimentation basins to treat disturbed area runoff prior to discharge.	Prior to and progressively during operations.
D4	Continue and extend existing Water Management System.	Continuous during operations
D5	Continue the existing Surface Water Monitoring Program and extend to include: <ul style="list-style-type: none"> collection of grab samples along ephemeral watercourses such as Station Creek, during or immediately after surface runoff events; monthly water quality sampling of water storages on the site; and regular collection of data on water quality, storage water levels (including the Portal Sump) and pumping volumes between storages. 	Continuous during operations
D6	All pumped inflows to dirty water storages will cease when the storage water level reaches a defined Maximum Operating Level.	Continuous during operations
D7	If the weather outlook indicates future significant rainfall, water will be pumped out of any dirty water storage (with the potential to discharge offsite) that is within 100 mm of spilling, provided that a suitable alternative storage location is available elsewhere on the site.	Continuous during operations
D8	In the event of a dirty water discharge offsite, water samples will be collected at the overflow from the spilling storage and at the surface water sampling locations along Station Creek (for spills within the Station Creek catchment). For a spill from Possum Skin Dam, a sample will be collected at the discharge point and at the point of inflow to Glennies Creek.	Continuous during operations
D9	If a spill occurs, an incident report will be prepared which documents the circumstances leading to the spill, the measures taken to prevent the spill, the estimated spill volume and duration, and the measured water quality results. Any spillage will be reported to DECC in accordance with the requirements of the site's Environment Protection Licence.	Continuous during operations
D10	After construction of drainage works is complete, disturbed areas will be topsoiled and revegetated using a combination of pasture grasses and cover crops to stabilise the ground surface.	During and following operations as appropriate.
D11	As part of the rehabilitation activities, above ground landforms will feature drainage provisions designed to effectively capture and divert surface water run-off to stable disposal areas prior to being discharged into surrounding watercourses.	During and following operations as appropriate.
Biodiversity		
E1	A Flora and Fauna Management Plan will be developed and include measurements for the minimisation or avoidance of impacts on native flora and fauna. This will include: <ul style="list-style-type: none"> pre-clearance surveys; groundcover clearance protocol; site management measures such as temporary exclusion fencing, maximum vehicle speeds and reducing the use of lighting to decrease impacts on nocturnal fauna; and limiting vehicular and personnel entry into retained vegetation through temporary exclusion fencing, locating access roads and tracks to avoid habitat and use of signage where necessary. 	Prior to commencement of operations.
E2	Fauna management procedures will include: <ul style="list-style-type: none"> monitoring of trees for fauna before and during clearing operations; avoiding trees with resident fauna as much as practicable; 	Prior to and during operations.

Item	Mitigation Measure and Commitment	Implementation
	<ul style="list-style-type: none"> • demarcation and avoidance of identified hollow bearing trees wherever possible; • carefully sawing and placing intact hollow-bearing trunks and branches into adjacent areas of native vegetation; • replacing habitat, such as nest boxes, where habitat trees are to be removed; • maintaining existing maximum vehicle speed limits within the Open Cut Project Area to reduce fauna road fatalities; • limiting vehicular and personnel entry into retained vegetation through temporary exclusion fencing; and • directing lighting at operating equipment to reduce light spill onto nocturnal fauna species in adjacent vegetation. 	
E3	<p>Pre-clearance surveys will involve:</p> <ul style="list-style-type: none"> • diurnal searches for birds, nests and roosts including targeted searches for communal nests of the Grey-crowned Babbler; • active searches for microbats, including checking under exfoliating bark; and • nocturnal surveys, including stag watching of identified habitat trees, specifically focusing on observing use of trees by microbats. 	Prior to clearing activities.
E4	If threatened species nests or nestlings are observed within or close to the Open Cut Area then clearing will be postponed until the nestlings have hatched and fully-fledged. If operational constraints mean that this delay is not practicable then DECC will be consulted to determine if relocating the species is acceptable.	Prior to and during clearing operations.
E5	<p>A groundcover clearance protocol will be implemented and involve:</p> <ul style="list-style-type: none"> • removal of large woody debris using excavator grabs or raking if practicable; • placing of intact large woody debris within adjacent areas of intact vegetation; • stripping and stockpiling leaf litter and topsoil separately from deeper fill material; and • reusing leaf litter and topsoil in rehabilitation works. 	During clearing and soil stripping activities.
E6	Fencing will be implemented to exclude grazing by cattle within retained patches of remnant vegetation to improve habitat value and floral diversity.	Prior to, continuous, during and following operations.
E7	A weed and pest management plan will be prepared and implemented as part of management procedures in order to control feral animals and to limit the spread of weeds.	Prior to commencement of and during operations.
E8	Revegetation of suitable components of the Open Cut Area will be undertaken using species representative of the Ironbark Woodland.	During rehabilitation and revegetation programs.
E9	<p>Subject to the receipt of all necessary approvals/permits, a creek rehabilitation program will be undertaken along Station and Glennies Creeks and will include:</p> <ul style="list-style-type: none"> • erosion control, rubbish removal, complementary planting, weed control, habitat enhancement and exclusion of grazing stock from riparian zones; and • a monitoring and management program to identify and manage noxious weed infestations. 	Prior to, continuous during and following mining operations.
E10	<p>Integra will implement a biodiversity offset package in consultation with DECC to compensate for the potential clearing of 19ha of remnant native vegetation and will include:</p> <ol style="list-style-type: none"> 1. Revegetation of suitable components of the Open Cut Area; 2. Conservation and rehabilitation of the degraded riparian and forest habitat along Glennies and Station Creeks; and 3. Identification and permanent conservation of a suitable woodland offset in the locality, a minimum of 30ha in size, in consultation with DECC. <ul style="list-style-type: none"> • Pending the satisfaction of the 3 components above, Integra will provide a bond or security to DECC which could be used in the event that Integra does not identify a suitable offset in the specified timeframe. 	In accordance with Project Approval requirements.
Traffic and Transportation		
F1	Adhere to RTA and Council restrictions on transport hours and safety/warning requirements for transportation of oversize loads on local roads.	Continuous during operations.
F2	Minimise the duration of road closures on the southern end of Middle Falbrook Road during blasting.	When blasting within 500m of the open sections of Middle Falbrook Road.
F3	Blasting within 500m of the Main Northern Railway line will be controlled under the existing procedure (PRO_2029 Blasting Adjacent to the Main Northern Railway Line) that has been developed in consultation with ARTC.	When blasting within 500m of the Main Northern Railway Line.

Item	Mitigation Measure and Commitment	Implementation
F4	Provide notification on the morning prior to a blast of blast times to residents and others who request to be included on the blast notification list.	Prior to all blasts.
Noise and Blasting		
G1	Use noise mitigated mobile equipment to achieve the predicted noise emission levels at the identified receptors.	Continuous during operations
G2	Restrict evening and night-time mining operations, where practicable, to areas that minimise emission levels outside of the Project boundary.	Continuous during operations
G3	Undertake development activities such as tree clearing and soil stripping during day time operations only, where practicable.	Continuous during operations
G4	Refine on-site noise mitigation measures and operating procedures, i.e. based upon monitoring results.	Continuous during operations
G5	Initiate regular discussions with potentially affected residents to proactively identify noise-related issues of concern.	Continuous during operations
G6	Consider acoustic mitigation at residences where exceedances of the project specific criteria are substantiated by monitoring.	Continuous during operations
G7	Consider negotiated agreements with landowners where exceedances of the project specific criteria are substantiated by monitoring.	Continuous during operations
G8	Continued implementation of the existing Explosive Hazard Management Plan to ensure the safety of employees and the public during explosives handling and blasting operations.	Continuous during operations
G9	Restrict blasting to between the hours of 9.00am and 5.00pm Monday to Saturday, unless blasts outside this time are required for misfire re-blast, emergency or safety reasons.	Continuous during operations
G10	Blast design and implementation to be undertaken by a suitably qualified blasting engineer and/or experienced shot-firer to ensure ANZEC Guidelines are met at all non-project related residences surrounding the Open Cut Project Area.	Continuous during operations
G11	Refine blast mitigation measures and operating procedures as required, based on monitoring results.	Continuous during operations
G12	Provide notification on the morning prior to a blast of blast times to local residents and others who request to be included on the notification list.	Continuous during operations
G13	Use aggregate as the stemming material (not drill dust) in order to fully contain the explosives within the blasthole.	Continuous during operations
G14	In the case of the Part Pit Extent (i.e. Integra is unable to acquire Residence 153 or negotiate an agreement with the owner), blasting will not be undertaken within a 500m Exclusion Zone surrounding the 'Dulwich' residence and 200m from the property boundary until such time that it can demonstrate to the Director-General that blasting can be undertaken without an unacceptable risk to the resident, residents, their stock or residence.	Continuous during operations
Air Quality		
H1	Only the minimum area required for the operation of the Open Cut Project will be disturbed. Reshaping, topsoil emplacement and rehabilitation of overburden emplacement areas will occur as soon as practicable after the completion of overburden emplacement.	Continuous during operations.
H2	Coal handling areas/stockpiles will be kept in a moist condition using water carts to minimise wind-blown and traffic-generated dust.	Continuous during operations.
H3	Water sprays will be available for use on ROM coal stockpiles as required to reduce airborne dust.	Continuous during operations.
H4	All roads and trafficked areas will be watered when required using water trucks.	Continuous during operations.
H5	All haul roads would be clearly defined, especially where they cross overburden emplacement areas.	Continuous during operations.
H6	Development of minor roads will be limited and the locations of these will be clearly defined.	Continuous during operations.
H7	Minor roads used regularly for access etc will be watered.	Continuous during operations.
H8	Obsolete roads will be ripped and re-vegetated.	Continuous during operations.
H9	Access tracks used by topsoil stripping equipment during their loading and unloading cycle will be watered.	Continuous during operations.
H10	Long term soil stockpiles (not used for over 3 months) will be revegetated.	Continuous during operations.
H11	Dust aprons, dust extraction systems or water injection will be used during drilling operations.	Continuous during operations.
H12	Adequate stemming will be used during blasting.	Continuous during operations.
H13	A real-time PM ₁₀ monitor (TEOM) will be implemented at the location agreed with the DECC in accordance Conditions of Consent for North Open Cut (PA 06_0073). This will be located in the vicinity of Residence 48. Should the 24-hour average concentrations of PM ₁₀ approach the cumulative assessment criteria 150 µg/m ³ , the Operations Manager (Open Cut) of the	Continuous during operations.

Item	Mitigation Measure and Commitment	Implementation
	mine would review the current Open Cut operations and take remedial action to ensure the impact on the property is kept below the criteria. Should the criteria be reached, then all Open Cut operations will cease.	
H14	A real-time PM ₁₀ (TEOM) will be located in the vicinity of Residences 108 to 112. Should the 24-hour average concentrations of PM ₁₀ approach the cumulative assessment criteria 150 µg/m ³ , the Operations Manager (Open Cut) will review the current Open Cut operations and take remedial action to ensure the impact on the property is kept below the criteria. Should the criteria be reached, then all Open Cut operations will cease.	Continuous during operations.
H15	Rather than establish an additional monitor at Residence 87, Integra will negotiate with Ashton mine the joint use of data from the existing real-time PM ₁₀ (TEOM) monitor at this location (see TEOM No. 3 on Figure 12-3 for location).	Continuous during operations.
H16	Integra will negotiate with Ashton Coal for the joint use of data from the other sites in the Ashton mine monitoring network (see Figure 12-3 for locations). This will enable real-time monitoring of the impacts of the operations to the west of the Open Cut Project Area.	Continuous during operations.
H17	The results from the dust monitoring program will be regularly reviewed to ensure the data being collected is meaningful. Where warranted, the program will be adjusted in consultation with DECC, with operating/management measures modified accordingly.	Continuous during operations.
H18	During Years 1 -3 of the Part Pit Extent (i.e. in the case that Integra is unable to acquire Residence 153 or negotiate an agreement with the owner), additional controls will be implemented and will include: <ul style="list-style-type: none"> • re-positioning of the main waste and coal haul routes to reduce impacts on Dulwich; • treatment of the main haul routes to achieve a level of dust control greater than 75%; • development of an Environmental Management Plan that will address environmental controls to be implemented as part of pre-operational phase soil removal activities; • control of emissions from drilling operations through the application of water; and • increasing the moisture content of the ROM coal in-pit. 	Prior to the commencement of operations and continuous during operations.
Aboriginal Archaeology		
I1	All actions and strategies for the management of cultural heritage values will be defined in an Aboriginal Cultural Heritage Management Plan developed in consultation with participating Aboriginal groups.	Prior to the commencement of operations.
I2	Prior to any soil disturbing activities, archaeological surveys will be conducted in those areas within the Open Cut Area to be impacted but which have not been surveyed to date. These areas include the Dulwich Property.	Prior to commencement of operations within potentially affected area not previously surveyed.
I3	Sites which will not be impacted by open cut mining will be identified on mine plans with the requirement not to disturb the ground in these areas. If there is risk of impact, temporary fencing will be erected and restrictions placed on access.	Prior to commencement of operations.
I4	Sites which may be directly or indirectly impacted by activities associated with mining will be identified on mine plans with development avoiding impact to these sites. Where development associated activities occur in close proximity to sites, temporary fencing will be constructed. Where direct impact is unavoidable the strategies outlined in I5 will be followed.	Prior to commencement of operations.
I5	Sites which will be directly impacted by open cut mining will be subject to: <ul style="list-style-type: none"> • collection and recording of surface artefacts and storage in accordance with the requirements of Aboriginal Groups; and • targetted subsurface salvage excavation programs as determined in consultation with the Aboriginal stakeholders. 	Prior to disturbance.
I6	A 'Keeping Place' will be provided for the secure storage of cultural material collected. The Keeping Place will be determined and agreed in consultation with the Aboriginal Groups during the formulation of the Aboriginal Cultural Heritage Management Plan. The Keeping Place will be retained in perpetuity subject to the recommendations of the Aboriginal Groups with regard to the long-term positioning of the sites.	Prior to commencement of operations.
European Heritage		
J1	Work Method Statements for archaeological investigation will be prepared for Zone 1 and, dependant on the acquisition of Dulwich, for Zone 2 as identified in Figure 14-2 .	Prior to commencement of operations within Zone 1 and/or 2.
J2	Project planning and timing will take into consideration any heritage management requirements.	Continuous during operations.
J3	If Dulwich is acquired, a WMS for heritage management and archaeological investigation will be prepared specifically for Zone 3 (Figure 14-2);	Prior to commencement of mine operations in Zone 3.

Item		Mitigation Measure and Commitment	Implementation
	or	If Dulwich is not acquired, a Conservation Management Plan will be prepared to minimise and monitor project impacts on Dulwich.	Prior to commencement of activities which may impact on Zone 3.
J4		A forensic anthropologist will be engaged to prepare a detailed management plan for the excavation of the grave of James Glennie.	Prior to commencement of mine operations within 200m of European Heritage Zone 2.
J5		Should any other burial sites be exposed during surface scraping operations within the Mine Area, work will cease and appropriate personnel and authorities informed. If the remains are identified as historical in nature, management for skeletal remains will be undertaken by appropriate personnel and a report issued to the Coroner.	Continuous during operations.
J6		In the case of an intersection between European and Indigenous management strategies, or any other environmental management strategy, Integra will co-ordinate appropriate consultation between the parties in order to develop and agreement on how to proceed.	Continuous during operations
J7		Copies of final excavation reports will be issued to local libraries, historical societies, the NSW Heritage Branch Library and State Library of NSW.	On completion of excavation reports.
Visual			
K1		To the extent practicable, reduce the potential visual impact through the construction of visual amenity bunds/screens or soil stockpiles to temporarily screen views towards the proposed Open Cut Area.	Continuous during operations
K2		To reduce lighting impacts to sensitive receptors, work programs will be arranged, where possible, so that some activities that may be visible from surrounding view locations, occur within daylight hours of operation.	Continuous during operations
K3		Floodlights within the Open Cut Extension Area will be positioned to minimise the potential for lighting to impact sensitive receptors.	Continuous during operations
K4		Where possible, haulage roads and overburden tipping areas will be configured to minimise the potential impact associated with headlights and flashing lights associated with vehicles travelling across the Open Cut Project Area.	Continuous during operations
K5		Integra will consider any reasonable request by a residential receptor for assistance to establish a visual screen within their property through planting and/or landscape works, where such works would effectively reduce the visual impact of activities associated with the proposed Open Cut Extension.	Continuous during operations
Rehabilitation			
L1		Suitable species of vegetation will be planted and established to achieve the nominated post-mine land uses. The rehabilitation plan will clarify the projects rehabilitation goals and outcomes and will confirm the monitoring and management proposals.	Continuous during operations
L2		The majority of the post-mine landform will be revegetated with a combination of native and improved pasture species with scattered tree lots and tree corridors linking the surrounding rehabilitated areas, proposed tree planting corridors and surrounding existing native vegetation.	Progressively during operations
L3		The final landform will be stable and not subject to slumping or excessive erosion which would result in the agreed post mining landform not being achieved.	Prior to completion of Project activities and lease relinquishment
L4		The outside facing slopes of the post-mine landform will generally be a maximum of 10° where they are above the natural land surface. The internal facing slopes and those below natural surface reporting to the final void (including the low wall areas) will generally be a maximum of 18°.	Progressively during operations

APPENDIX B

SHORT TERM DUMPING STRATEGY

B



INTEGRA

Vale Short Term Dumping Strategy

Presented to

**NSW Department of Planning
and Infrastructure**

Contents

1. Executive Summary	1
1.1 Key Elements of the Vale Submission.	1
2. Structure of Response	2
3. The Vale Story.....	3
3.1 Background to Vale	3
3.2 Vale’s Australian Operation	4
4. Short Term Dumping Strategy	7
4.1 Overview	7
4.2 Preferred Dumping Strategy and Stages	8
4.3 Supporting Information	8
4.4 Approvals Required for Short Term Dumping Strategy	9
5. Request for Modifications to Extend Time to Meet Existing Conditions.....	10
5.1 Conveyor Deferral	10
5.2 Biodiversity Offsets	10
6. Communications and Community Engagement Plan	13
6.1 Introduction	13
6.2 Objectives	13
6.3 Communications Tools and Materials	14
6.4 Community Engagement Activities	16
7. Vale Integra Website Upgrade Action Plan	19
8. Appendices	20

1. Executive Summary.

Vale is pleased to present to the NSW Department of Planning and Infrastructure (DP&I) its Short Term Dumping Strategy and other planning approval matters relevant to its existing underground and open cut operations (collectively known as the Integra Complex), in response to the DP&I information request dated 21 September 2011.

Vale takes its legal obligations seriously and is committed to conducting operations in accordance with its environmental and planning requirements including approvals under the Environmental Planning and Assessment Act 1979 (EP&A Act).

As discussed with the DP&I and to ensure continued compliance with its existing Integra Open Cut Project Approval (PA08_0102) and the Integra Underground Project Approval (PA08_0101) granted by the (then) Minister for Planning on 26 November 2010 (Project Approvals) under Part 3A of the EP&A Act, Integra requests that the Minister modifies its Project Approvals in accordance with section 75W of the EP&A Act, as set out within this submission.

1.1 Key Elements of the Vale Submission.

Vale confirms that its submission addresses the following items requested by the Department:

- Short term dump strategy
- Request for Modifications to Extend Time to Meet Existing Conditions
- Communication & Community Engagement Strategy for communicating the short-term dumping strategy
- Website upgrade action plan

2. Structure of Response

Vale's response is set out in the following sections:

- Section 3: The Vale Story – setting out the background to Vale and its Australian operations
- Section 4: Short Term Dumping Strategy – outlining Vale's proposed short term dumping strategy addressing how we intend to deal with non-compliance, and identifying statutory approvals required to implement the strategy
- Section 5: Request for Modifications to Extend Time to Meet Existing Conditions – outlining extensions sought by Vale to existing conditions
- Section 6: Communications and Community Engagement Plan – outlining Vale's draft communications and community engagement activities
- Section 7: Website Upgrade Strategy – outlining Vale's action plan to upgrade Vale's Integra website

Supporting information is provided in appendices as follows:

- Appendix 1: Short Term Dump Strategy – this appendix includes the maps and supporting information detailing Vale's suggested strategy
- Appendix 2: Resolution of Non-compliance Issues – this appendix explains in detail the response to the non-compliance issues and requested changes.
- Appendix 3: Options Studied for area and volume potential for ex-pit and in-pit dumping – this appendix provides an overview of the options considered by Vale in determining its preferred short-term dumping strategy
- Appendix 4: Vale Integra Website Content Sitemap – this appendix provides a site map of Integra's new website

This structure allows Vale to provide a complete and comprehensive response to DP&I's information request.

3. The Vale Story

Vale's vision is to be the best and largest mining company in the world and to surpass the established standards of excellence in research, development, project implementation and business operations.

Since its privatisation in 1997, Vale has grown to become the second largest mining company in the world, with a market capitalisation of US\$177B as at June 2011. Vale is the world's largest producer of iron ore. Vale's aim in Australia is to become one of the largest producers of coal and amongst the largest exporters of seaborne metallurgical coal by 2021.

Crucial elements of Vale's growth story have been its:

- Continual investment in its activities to surpass international standards in environmental management
- Commitment to the communities where it operates
- Ability to facilitate mine operations by investing in supporting infrastructure

Key Messages:

- Vale's Australian presence is headquartered in Brisbane. This office is the global centre of Vale's coal operations and reflects the importance Vale places on the Queensland coal market.
- Vale currently employs more than 1,500 people in Australia. Vale plans to double its Australian workforce by 2016 and triple its Australian workforce to over 4,000 employees by 2021.
- Vale is committed to innovation and investing in technology – it has established the Vale-University of Queensland Coal Geosciences Lab and works with other academic institutions to continuously develop new technology.
- Vale is committed to sustainable development and in 2010 invested US\$1.4B in corporate and social responsibility programs worldwide.

3.1 Background to Vale

Vale is the second largest metals and mining company in the world, operating in 38 countries on five continents. Vale employs over 128,000 people including direct employees and contractors. The company is currently ranked the 16th largest publicly traded company in the world with a market value of approximately US\$177B (at June 2011). It is listed on the Sao Paulo, Paris, New York, Hong Kong and Madrid stock exchanges.

Originally founded by the Brazilian Federal Government in 1942, the company has experienced rapid growth since it was privatised in 1997. Vale has successfully grown from the sixth largest metals and mining company globally with a market capitalisation of US\$9.2B, into the second largest mining company in the world today with a market capitalisation of US\$170B at December 2010. This has been achieved both through organic growth and strategic acquisitions, underpinned by strong management and diversity of capital sources, e.g. multiple stock exchange listings.

3.1.1 Vale's Vision and Mission

Looking ahead, Vale's vision is to become the largest mining company in the world by market capitalisation, and to surpass established standards of excellence in research, development, project implementation and business operations.

Vale's mission is to transform mineral resources into prosperity and sustainable development.

Vale's coal business is an important contributor to Vale achieving this vision. Vale's global coal vision is to be the second largest global metallurgical coal exporter of seaborne coal by 2021, while Vale's Australian coal vision is to be one of the top four producers of coal in Australia by 2021.

3.1.2 Vale's Global Operations

Vale is the world's largest producer of iron ore and iron pellets and the world's second-largest producer of nickel. Vale is one of the world's largest producers of manganese ore and ferroalloys. Vale also produces copper, thermal and coking coal, phosphate, potash, cobalt, kaolin and platinum group metals. To support its growth strategy, Vale is actively engaged in mineral exploration efforts in 24 countries around the globe. Vale operates large logistics systems in Brazil, including railroads, maritime and intermodal terminals, which are integrated with its mining operations. In addition, Vale has a maritime freight

portfolio to transport iron ore. Directly and through affiliates and joint ventures, Vale has investments in energy and steel businesses. Figure 1 illustrates the diversification of its operations by products/business and geography (customers).

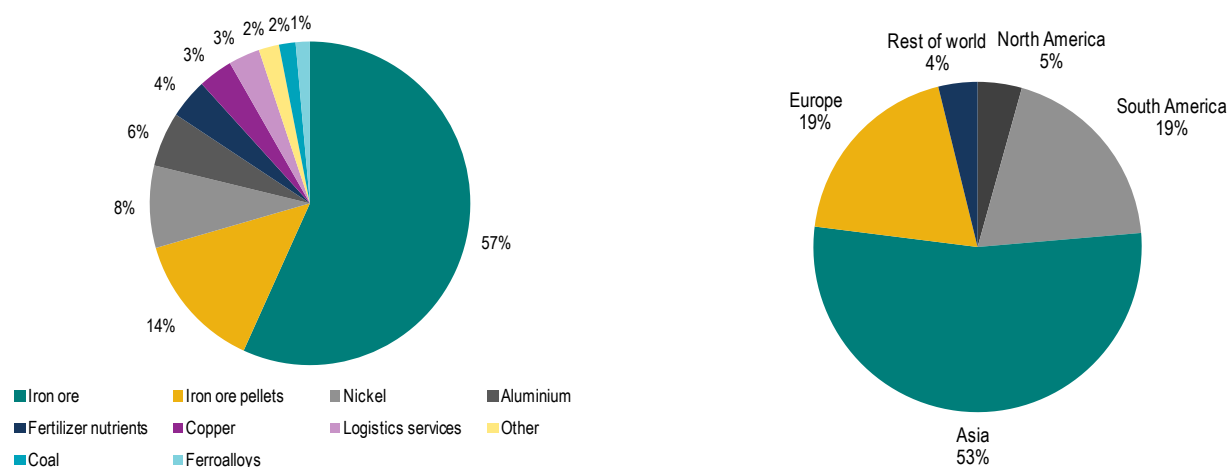


Figure 1 - Distribution of Vale's operations by product and geography (customers).

3.2 Vale's Australian Operation

Vale entered the Australian market in 2007 when it acquired AMCI Holdings. Vale undertakes exploration and mining activities in Australia and has 10,000 square kilometres of tenements in coal (its main focus), copper and iron ore, and an interest in fertilisers. Vale's Australian Coal Vision is to be one of the top four producers of coal in Australia by 2021. Its Global Coal Division is headquartered in Brisbane, with additional offices in Perth, Carborough Downs and the Hunter Valley, NSW. Vale has joint venture coal mine operations in Queensland's Bowen Basin and in the Hunter Valley. It also holds exploration licences for coal in the Galilee Basin, Bowen Basin and Millungera in Queensland, together with a range of other exploration licenses for other minerals in New South Wales, Western Australia and the Northern Territory.

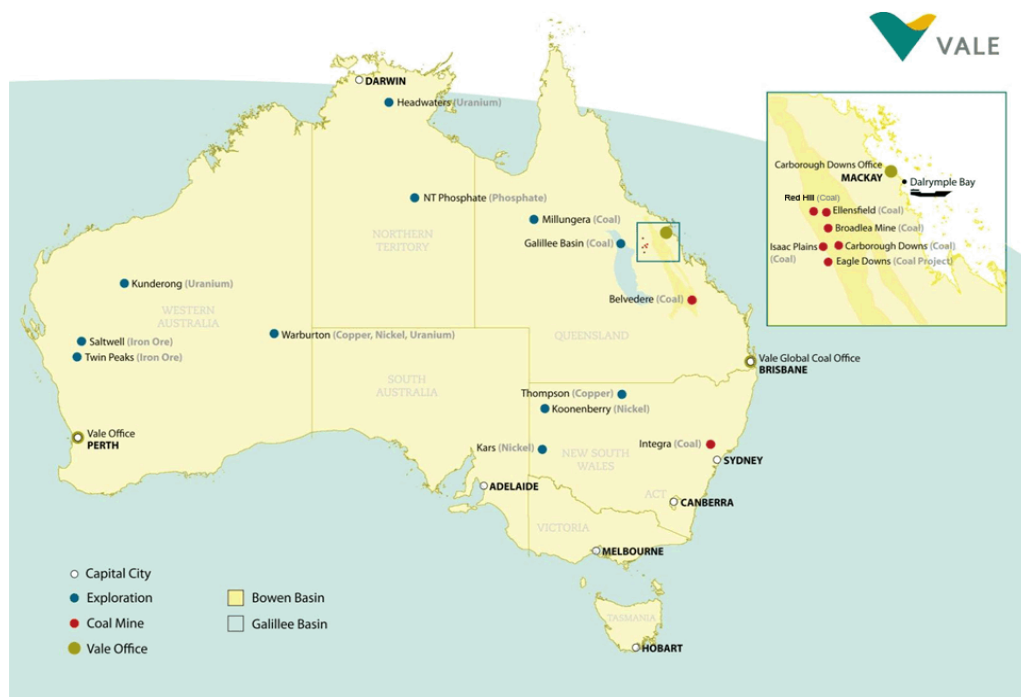


Figure 2 – Vale's Australian mining interests

3.2.1 Australian Coal Operations

Vale's Australian coal operations are key to the success of Vale's global coal business going forward. To achieve Vale's global vision of being the second largest exporter of seaborne coal by 2021, and one of the top four producers of Metallurgical coal in Australia by 2021, Vale predicts it will need to more than double its workforce to over 2,500 employees in Australia by 2016 and triple its workforce in Australia to over 4,000 employees by 2021. Of the 40Mtpa production capacity targeted for 2016, it is expected output from Australian mines will account for more than 20Mtpa of this.

In 2012 Vale expects to produce 6.1Mtpa from its Carborough Downs, Issac Plains and Integra Coal mines. This volume is expected to increase significantly by 2016 when Vale anticipates to produce over 20Mtpa and in 2021 when Vale plans to have 10 mines in operation, with corresponding production volumes of 60Mtpa.

3.2.2 Supporting Sustainable Development

For Vale sustainable development is reached when an economic activity adds value to its shareholders, contributes to the wellbeing of society and to environmental conservation territorially and globally. This happens through the transformation of mineral resources into social development, economic prosperity, and environmental sustainability and the establishment of partnerships with governments, private sector groups, community groups and greater society.

Vale relates sustainable development to four dimensions that are applicable throughout the life cycle of mineral developments: economic, social, environmental and stakeholder engagement. Vale believes that it is only through continuous engagement of stakeholders concerning constructive agendas, that it will be possible to achieve long-term strategies and maximise concrete results in the other three dimensions.

With that in mind, Vale seeks to maintain continuous dialogue with its stakeholders aimed at maximising its contribution to the socio-economic development of the regions in which it operates, to conserve the environment, and to leave behind a positive legacy of social, economic, and environmental development.

In order to achieve these goals, Vale's sustainability strategy is based on three pillars, as detailed in Figure 3:



Figure 3 – Vale's approach to sustainable developments

Vale is internationally recognised as a sustainable business and knows that long-term business success is closely linked to the implementation of sustainable practices. In 2010, Vale invested US\$1.14B in corporate and social responsibility, and environmental programs. This included social investment through:

- Job creation and economic growth through commitment to hire and train local workforces
- Educational and cultural program
- Community programs

The Vale Foundation is Vale's social arm and works in communities where the company contributes to integrated economic, environmental and social development, strengthening social capital and respecting local cultural identity.

3.2.3 Vale's commitment to the Environment

Vale invests continually in its activities to surpass international standards in environmental management. Aware that the environment is fundamental to the quality of its products and services, Vale is committed to sustainability. Throughout its operations, Vale pursues a balance between local socioeconomic development and maintaining the quality of natural resources, biodiversity and life. Developing and conserving are essential aspects of this strategy. Vale's initiatives contribute to the performance of its Environmental Quality Management System (SGQA). This model is based on ISO 14001 standards, providing tools to manage the environmental impacts of its activities, products and services.

More recently in 1st Quarter 2011, Vale invested US\$70.1M in social projects and a further US\$125.5M in environmental protection and conservation. Vale is also the first mining company in the world to have a 100% balanced ratio between impacted and recovering areas, and in 2010 became the first mining company in the Corporate Sustainability Index of the Sao Paulo Stock Exchange.

Specifically, Vale is involved in a number of environmental programs regarding:

- Climate change
- Vale has developed the *Vale Carbon Program* which aims to achieve excellence in the management of greenhouse gas emissions by 2012
- Vale is the only Latin American company in the CDLI, a leadership index of the Carbon Disclosure Project (CDP) that identifies the top scoring companies in the disclosure of carbon emissions and risk management
- Energy
- 32% of Vale's energy demand in 2010 was generated by the company's own plants, thermal generators, or cogeneration
- Vale's consumption of renewable energy increased 8% in 2010, and the company implemented 22 projects aimed at improving energy efficiency
- Water
- In 2010, 79% of the 1.2 billion litres of water required for Vale's operations was supplied from recycled and/or reused water sources
- Iron ore and pelletizing operations, the companies largest business areas, reported no significant increase in the total volume of water withdrawal in 2009, despite large increases in production

3.2.4 Social and community involvement

As a new entrant into the Australian market, locally, within Australia, Vale is establishing an Australian sustainability program, leveraging its strong international profile and expertise in the area. Later in 2011 Vale will establish the Vale Foundation in Australia, which will drive its social responsibility programs. Vale believes in actively engaging with local communities to identify long-term sustainable programs that it can initiate and support that will build lasting capacity in communities beyond the life of mining operations.

In 2011, Vale has partnered with The University of Queensland to undertake a detailed 'social diagnosis' assessment of each community in which they currently operate and plan to operate in order to tailor its ongoing social responsibility program. This underscores Vale's responsible approach to investment and development of the communities in which it operates.

4. Short Term Dumping Strategy

4.1 Overview

The proposed strategy below is to satisfy the following requirements given by the DP&I in September 2011. This strategy will cover the requirements listed by the DP&I which were:

1. What will be done with material already in non compliance i.e. rehab it , remove it, etc
2. Time frame until in pit dumping or modification approved
3. Impact on long term strategy

To put some context around short term, Integra proposes that the short term strategy be delivered in three stages:

- First stage is four months to December 2011 which covers what the operation can do before any modification is sought and assessed.
- The second stage will provide capacity to Q1 2015 and is dependent on a modification approval and extends to include in pit dumping in the NOC and the capping and subsequent overburden placement on TD3.
- The third stage will provide capacity beyond 2015 and is for further extension of the ex-pit areas into Bio-diversity areas to the east of the current ex-pit area.

A three stage approach is proposed due to the preliminary dump study work which has identified an issue of insufficient ex-pit dump space in two separate periods of time, the first in 2013 and the second in mid 2015 therefore further ex-pit dump space is needed. The study was conducted at a high level on an annual basis and further detail is presented below. However, Vale recommends that a detailed dump study is undertaken between the short term strategy submission and the long term strategy submission to more accurately confirm required dump space beyond stage 2 in 2015.

The tables below explain the detail of each of the non-compliance issues and requested changes with details including priority sequencing, ongoing issues, what documents require changes and the assumptions used to support the suggested action. The tables will follow the suggested staged approach described above and have supporting diagrams broken into over burden removal, rehabilitation and dumping areas. Note the areas nominated are also in sequential order of use.

The dump strategy for the north open cut does have impacts on the long term strategy for the extension of the NOC to the north therefore material will be dumped against the sidewall and will either be rehandled or a barrier pillar design required. Other long term impacts are the increased area of dust and noise which need to be addressed with temporary rehabilitation before final land forms are established.

As for the Western Extension pit there are potential issues that may be raised between now and the long term strategy submission, therefore, to be as complete as possible the following items need to be raised and discussed.

1. LOM Tailing Dam placement in the dump area for Western Extension
2. Dump capacity concerns in year2-4 and then LOM
3. Water management strategy
4. Land form variation

4.2 Preferred Dumping Strategy and Stages

Below is a breakdown of the three stages into activities for the NOC.

4.2.1 Stage 1 – Short term Strategy no modification required (Sept – Dec)

1. Overburden Removal
 - a. Removal of the approx 95k(bcm) material from Area 1 NOC dump site that is above the 141AHD level.
2. Rehabilitation
 - a. Rehabilitation of Area 2. A total area of 6.1Ha.
3. Dumping
 - a. Areas 4-5-6-7-8 have been nominated for dumping that complies with current EA.

4.2.2 Stage 2 – Short term Strategy with modification approved – (AHD141)

1. Rehabilitation
 - a. Rehabilitation then can begin on Area 3. A total area of 16.5Ha.
 - b. When areas available from new dumping areas.
2. Dumping
 - a. Dumping can begin in new areas out of pit, Area 9.
 - b. Dumping can begin in-pit in Area 10 in conjunction with out of pit dumping.

4.2.3 Stage 3 – Short term Strategy with modification approved – (Bio-Diversity Area)

1. Dumping
 - a. Bio-diversity area to the east of the current ex-pit Area 11.

4.3 Supporting Information

Please refer to appendix 1 for plans illustrating the overburden removal, rehabilitation and dumping areas supporting the three stage approach.

Please refer to appendix 2 for detailed overview of non-compliance issues and associated changes to EA, MOP or other.

Note, Vale has undertaken detailed options analysis in determining its preferred short-term dumping strategy outlined above in section 4.2. An overview of the options considered is enclosed in appendix 3.

4.4 Approvals Required for Short Term Dumping Strategy

The following is a summary of the approvals that are required for the implementation of the short-term dumping strategy:

1. Overall maximum dump height approval of 141 AHD to enable shaping to existing dumps and future capping of tailings dams
2. Footprint adjustment to area 9 to enable adequate storage of material to cap tailings dams

Modifications to Project Approvals

Integra requests that the Minister modifies its Project Approvals for points 1 and 2 above

4.4.1 Next Steps

Also discussed with the Department, Integra is developing a comprehensive modification application which will deal with various other matters such as:

- a. NOC operating hours on Sundays and public holidays
- b. Train refuelling facility near rail loop
- c. Removal of residences 351 and 401 from the acquisition zone

Modifications to MOP

Modification to Integra's existing MOP is also required for 1 and 2 above.

LOM Tailings Emplacement S100

Our initial assessment indicates it is unlikely that the implementation of the short-term spoil dump strategy will require any changes to the current approval.

Our CHPP Manager will confirm this in the coming weeks (before 27th October) in discussions with Tim Martin (Dept Planning) and a representative of the Dam Safety Committee.

Management Plans

As per Schedule 5, condition 4, management plans will be reviewed within 3 months of any modifications to the project approval and revised as necessary.

It is anticipated that minor amendments may be required to the Management Plans for:

- Water
- Noise
- Air Quality
- Waste
- Rehabilitation
- Erosion & Sediment Control

Some of these management plans have only been submitted in recent months and have not yet been approved. It would be prudent for Integra to only modify such plans once they are approved or comments received.

5. Request for Modifications to Extend Time to Meet Existing Conditions

Vale submits to DP&I the following modification requests to its Project Approvals under section 75W of the EP&A Act. In particular Vale requests that the Minister modifies the Project Approvals to enable the extension to existing deadlines to address various issues that have arisen and to ensure that Integra continues to operate in accordance with its Planning Approvals.

5.1 Conveyor Deferral

5.1.1 Existing Condition and Deadline

Schedule 3, condition 48 of PA0801_01 and PA0801_02 states that:

‘By the end of December 2011, the Proponent shall cease truck haulage of ROM coal from the underground surface facilities to the CHPP, and transport such coal only via overland conveyor, except in an emergency situation with the prior written approval of the Director General.’

5.1.1.1 Vale Request for Extension

Vale has undertaken a number of feasibility and options studies regarding conveyor installation and Integra have determined that installation of an overland conveyor between the Underground surface facilities and the Coal Handling Preparation Plant is not economically viable.

Integra seeks to modify the above condition from its Project Approvals (PA0801_01 and PA0801_02) via a Section 75W modification under Part 3A of the EP&A Act. The proposed modification will outline the specifics of the feasibility studies, the noise and dust modeling, and the visual amenity assessments carried out to date. However, Integra will need to continue to haul ROM coal from the underground surface facilities while this modification is being assessed.

In order to enable Integra to prepare this detailed modification application and for it to be assessed, Vale now seeks a separate modification of condition 48 to provide for a short term extension of the time for compliance with the condition. The modification would alter the current deadline of 31 December 2011, to 30 September 2012. This modification would allow sufficient time for the detailed modification application concerning the conveyor to be prepared, assessed and determined and to allow continued, compliant operation of the Underground during this period.

5.2 Biodiversity Offsets

5.2.1 Existing Conditions and Deadlines

Schedule 3, conditions 41 to 44 of Project Approvals 08_0101 and 08_0102 state that:

41. *‘The Proponent shall implement the offset strategy summarised in Table 18, described in the open cut and underground project EAs, and shown conceptually in the figure in Appendix 8 to the satisfaction of the Director-General.’*

Table 18: Biodiversity Offset Strategy for the Integra Mine Complex

Offset Areas	Minimum Size
Northern Offset Area	121 hectares
Southern Offset Area	39 hectares
Western Offset Area	94 hectares

<i>Supplementary Offset Area</i>	<i>33 hectares</i>
<i>Bridgman Offset Area</i>	<i>86 hectares</i>

42. *'By the end of June 2011, unless the Director-General agrees otherwise, the Proponent shall revise the offset strategy referred to above, in consultation with DECCW, and to the satisfaction of the Director-General. The revised offset strategy must:*

(a) ensure provision of at least 140 hectares of Narrow-leaved Ironbark-Spotted Gum-Forest Red Gum Forest (or a suitable equivalent) to further offset the impact of the open cut project; and

(b) include an additional 6 hectares of Central Hunter Swamp Oak Forest (or a suitable equivalent) to offset the impact of the underground project on the Glendell Biodiversity Offset Area.'

Long Term Security of Offsets

43. *'By the end of December 2011, the Proponent shall make suitable arrangements to provide appropriate long term security for all the areas in the revised offset strategy to the satisfaction of the Director-General.'*

Biodiversity Management Plan

44. *'The Proponent shall prepare and implement a Biodiversity Management Plan for the projects to the satisfaction of the Director-General. This plan must:*

(a) be prepared in consultation with DECCW, and submitted to the Director-General for approval by the end of December 2011.'

5.2.1.1 Request for modifications to provide short term extensions of time

As discussed at the meeting with DP&I on 6 October 2011, Vale confirms that it is currently investigating the feasibility of granting, or procuring the feasibility of other owners to grant, restrictive covenants over the land the subject of the biodiversity offsets area. Whilst Vale can make a commitment in relation to its own land, subject to the terms to be agreed with the Department and obtaining any mortgagee consents, it obviously cannot commit third party landowners. Vale therefore requests to modify conditions 42 and 43 of its Project Approvals (PA0801_01 and PA0801_02) under section 75W of the EP&A Act to enable the biodiversity offset areas to be secured, as set out below.

In addition and as discussed during the meeting on 20 September 2011, recent work carried out by Vale's long term planning team has identified a significant coal resource located beneath the majority of the previously proposed Biodiversity Offset areas. While no plans currently exist to mine this area, based on the new information at hand, Vale does not wish to immediately take any action that will sterilize the recently identified resource, hence Vale requests approval from the Minister that:

1. the deadlines of 30 June 2011 for submission of a revised offset strategy, and
2. the deadline of 31 December 2011 for ensuring the long term security of the offset areas and submission of the Biodiversity Management Plan,

both be extended to 30 September 2012. Thus allowing for:

1. investigations of the feasibility of obtaining restrictive covenants for its current Biodiversity offset areas over land not currently owned by Integra:
2. alternative areas to be identified,

-
3. a revised strategy to be formed, and
 4. for suitable properties to be purchased for use as offsets.

As outlined above, Vale is seeking this extension by means of a modification to the date for compliance with conditions 42 and 43, in each case to 30 September 2012. Integra has already begun to locate potential alternatives for the current offsets and is confident that proposed deadline of 30 September 2012 can be met.

6. Communications and Community Engagement Plan

6.1 Introduction

The Integra short-term dump strategy Communications and Community Engagement Plan (CCEP) has been prepared as a project specific sub plan that will be delivered in parallel to the *Vale Australia Corporate Affairs and Communications Plan*.

The purpose of the plan is to outline a comprehensive communications and community engagement strategy which will inform, update and engage with the community regarding the changes to Vale's short term dumping strategy at its Integra operations.

It will outline the flow of communication and management of information, providing guidance for strategic communication to preserve and build Vale's reputation and image in the community.

The plan will be reviewed throughout delivery to ensure that the community is adequately aware and engaged in the current and future planning on the Integra mine.

6.2 Objectives

6.2.1 Integra Mine Objectives

The Integra mine-related objectives are:

- To develop and operate a well-planned, and managed mine.
- To ensure the mine has a strong compliance and safety record.
- To ensure the mine contributes to the communities that support it.
- To imbue all aspects of the mine's development and operations with Vale's values, which include:
 - ▶ Prioritising life and safety
 - ▶ Ethics and transparency
 - ▶ Respect for diversity
 - ▶ Excellence in performance
 - ▶ Economic, social and environmental responsibility
 - ▶ Entrepreneurship
 - ▶ Proud to 'be Vale'.
- To help strengthen Vale's position, working toward a robust future for the benefit of the company and the community it serves.

6.2.2 Communications Objectives

The objectives for communications activities relating to the short-term dump strategy are:

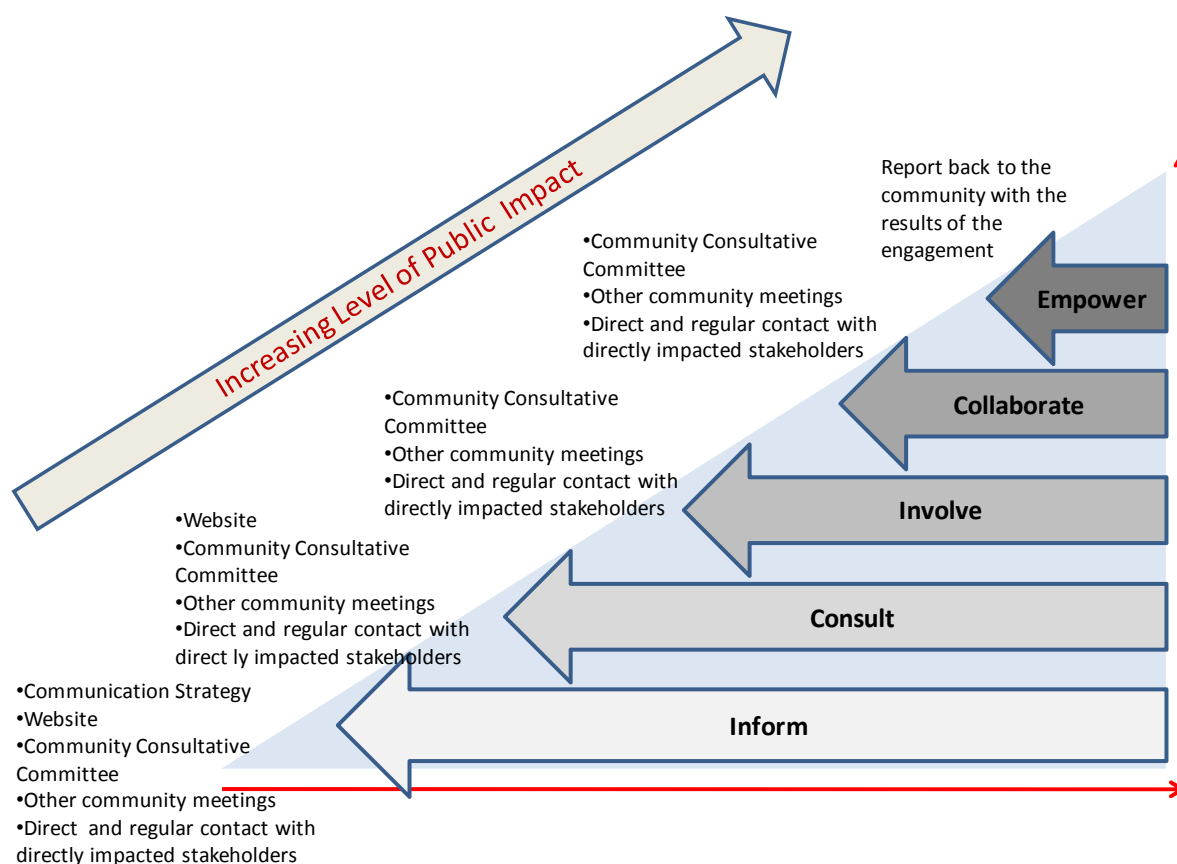
- To positively position Vale within Australia and globally through growing and strengthening Vale's profile as a coal producer in the region.
- To position Vale as a company committed to community engagement and interaction.
- To demonstrate Vale's commitment to open, respectful and collaborative engagement with stakeholders including the community.
- To provide regular ongoing communications to Vale's stakeholders to ensure that stakeholders are kept up to date with Vale's progress to achieving key milestones in the delivery of the revised short-term dumping strategy.

6.2.3 Community Engagement Objectives

Community engagement, or public participation as it is often referred to, is defined by the International Association of Public Participation as any process that involves the public in problem solving or decision-making and uses the public input to make decisions that are more informed. This includes decisions that directly affect the living, working, playing, studying, using services and doing business within the community.

Engaging with the community is more than just consulting. Community engagement includes informing, consulting with, involving, collaborating with and empowering the community. The diagram in Figure 4 shows various levels of community engagement and the amount of influence the community can have regarding final decisions. Different circumstances will require varying levels of engagement but all levels of engagement are equally important.

Please see below in figure 4 an overview of Vale's community engagement methodology.



6.3 Communications Tools and Materials

A range of consultation activities and communication tools will be used throughout project delivery.

All public information will be easily accessible, and Integra personnel will be available to respond to queries in a timely way.

This section provides an overview of each activity and tool for use throughout implementation of the CCEP.

On approval to from DP&I to proceed with the proposed short-term dumping strategy, Vale will undertake the following activities:

6.3.1 Integra Website Posting

All details of the short term dumping strategy will be posted on the Integra Website.

The website will allow stakeholders including the community to access information and contact details regarding the project at any time, and is a way to ensure accurate, up-to-date information is available immediately.

6.3.2 Fact Sheet/s

Fact sheets will allow Vale to ensure accurate, relevant information is available to be viewed by a wide audience quickly. Fact sheets assist in building project and company awareness amongst the community and interested parties.

A preliminary fact sheet will be developed outlining the short term strategy.

As the project progresses, supplementary fact sheets will be produced to provide updates on the achievement of key milestones.

Fact sheets will be distributed to the community and published on the Vale Integra website.

6.3.3 Letterbox Distribution

Fact sheets will be distributed via letterbox drops to households and businesses in neighbouring areas.

6.3.4 Press Advertising

Press advertising will be executed in the following papers in the region aimed at raising Vale's profile in the local community:

- Singleton Argus
- Hunter Valley Town and Country Leader
- Hunter Valley News
- Muswellbrook Chronicle

6.3.5 Integra Community Newsletter

The Integra Community Newsletter will incorporate details of the proposed changes to Vale's short-term dumping strategy.

It will be a tool used to:

- Outline the short-term strategy and changes to the existing dumping strategy
- Provide updates on progress and milestones
- Provide relevant contact details for the mine site, including freecall community information line, website and email

The Integra Community Newsletter will also be uploaded on the Vale website.

6.3.6 Freecall Community Information Line

Vale will utilise its existing freecall community information line to address specific questions and concerns of the community.

The number will be advertised on all project materials, including:

- Website
- Community Newsletters
- Fact Sheets

6.3.7 Consultation Management System

A Consultation Management System (CMS) allows all stakeholder enquiries and feedback to be captured and actioned in a comprehensive and timely manner. CMS acts as a 'living' database that records, tracks and manages stakeholder contact with the project team.

Stakeholder and community interactions will be recorded to assist in tracking issues, reporting and evaluation activities.

6.4 Community Engagement Activities

Vale recognises effective engagement generates better decision making in delivering sustainable environmental, economic, social and cultural benefits. To achieve Vale's mission, community engagement is a vital element for more inclusive and sustainable communities.

Community engagement promotes and supports:

- A more active, informed and involved community
- Greater accountability to all stakeholders
- Community direction and input into decision-making process
- Building trust between Company and community

Community engagement can lead to the identification of mechanisms for building the community's capacity to join with Vale and other stakeholders in dealing with complex matters and issues.

Vale will be working in parallel on two strategies in terms of community engagement.

First, Vale is working to improve and review immediate actions based on the local knowledge and experience.

Second, Vale is putting in place an action plan to develop and implement a medium and long-term community engagement strategy.

The short term action plan is presented below.

6.4.1 Stakeholder Mapping

A key step to enable Vale to comprehensively engage with communities is to undertake a stakeholder map to identify the different groups and organisations in town and develop a system to better engage with them. As a primary guidance for community engagement, Vale will adopt as important stakeholders the groups listed as follows. A better stakeholder map will be completed as part of Vale's Social and Economic Diagnosis as explained in section 6.4.2.

In a preliminary analysis the major groups identified are:

- Local Clubs
- Local associations
- Non-government organisations
- Landowners or impacted neighbours
- Indigenous groups
- Local Government
- State Government
- Government agencies
- Employees

6.4.2 Social and Economic Diagnosis Study

The first step for a good engagement process is developing a good understanding of the community where you are operating. To enable this, Vale commissioned the Centre for Social Responsibility in Mining (CSRM) at the University of Queensland to undertake an Integrated Social and Economic Diagnosis for the company's communities of interest. The methodology adopted for the study is based in a three-stage approach:

Stage 1: Desktop analysis and review

Stage 2: Consultation with local opinion leaders and knowledge holders in the communities

Stage 3: Consolidation of Stages 1 and 2 and recommendations on Vale social investment opportunities

Stages 1 and 2 have been completed and the University will start Stage 3 in the coming weeks. The purpose of the Social Diagnosis is to identify baseline community information and gap analysis to guide the development of the company management plans for social investment. Even without the outcomes and recommendations from the research it is possible to identify some activities and tools to support engagement. Once the final report is presented, Vale will review and develop a social investment plan.

Therefore, the initial information from Stage 1 and 2 will guide the immediate actions and the final document is part of the long-term engagement strategic plan.

6.4.3 Community Consultative Committee ("CCC")

Vale's strategy is not to undertake a 'town hall' meeting, however the strategy is instead to participate and join the meetings already in place as explained below.

The CCC meets biannually and involves Local Government, State Government, Community representatives and Integra representatives. The aim of the meeting is to inform the community about Integra activities, discuss issues and community perceptions. Vale will utilise the meeting to not only inform the community but also consult with the community by seeking feedback and actively engaging in community consultation.

Vale's next CCC meeting will be held in November 2011. Vale's Integra General Manager will attend the meeting to present the short-term dumping strategy. Vale will also request the Chairman to invite DP&I to attend this meeting.

6.4.4 Direct and regular contact with directly impacted stakeholders

Vale has existing relationships with its neighbours. The company will utilize these relationships to directly inform its neighbours of the short-term dumping strategy.

Vale's Integra General Manager will undertake a one-on-one meeting programme with these stakeholders.

6.4.5 Key Stakeholder Briefings / Meetings

Key stakeholder meetings and briefings will form the basis of one-on-one consultation with a wide range of stakeholders, including landholders, industry bodies and government agencies. They will be an essential means of gauging opinion, imparting information, identifying issues and working on and implementing mitigation strategies.

Vale will engage directly with the stakeholder groups outlined in section 6.4.1.

Briefings and meetings will be an important forum in which to:

- Inform about project progress and potential impacts
- Work collaboratively to identify potential issues and suitable mitigation strategies
- Work through regular or ongoing concerns

-
- Assist in maintaining open, communicative relationships that are personable and lead to faster resolution of issues and concerns.

Each briefing or meeting will be recorded in Vale's Consultation Management System as outlined in section 6.3.7, with minutes or notes of meetings provided to all parties where possible. While it is envisaged the majority of these meetings will be held at the initiative of Vale, community groups or individuals may also request meetings or briefings, and as such Vale will be prepared to undertake meetings on a reactive basis.

The company aims to be more involved with the different groups to better understand their needs and issues. Vale understands that engagement means not only discussing our impacts and the issues related to the Mine Site, but also discussing anything important to our community. The company will develop a meeting calendar and allocate the best Vale representative to attend these meetings; be it an environmental advisor, a community advisor, a manager or the Integra General Manager.

7. Vale Integra Website Upgrade Action Plan

Vale acknowledges that its existing website is difficult to navigate and therefore makes it unnecessarily difficult for stakeholders to access important information regarding the mine and mine plans.

To address this issue, Vale has committed to developing a new Vale Integra website. In order to achieve this, Vale has:

- Undertaken a full website review
- Executed a third party review process to assess and recommend a more user site map for delivery of information
- Appointed a web design agency to develop a new Vale Integra website
- Undertaken a review of non-compliance issues on the current website and mapped these to ensure they are addressed on the new website

As at 5 October 2011, Vale's new Integra website was 95% complete and scheduled to 'go-live' on 14 October 2011.

Please refer to appendix 4 for a content site map of the new website.

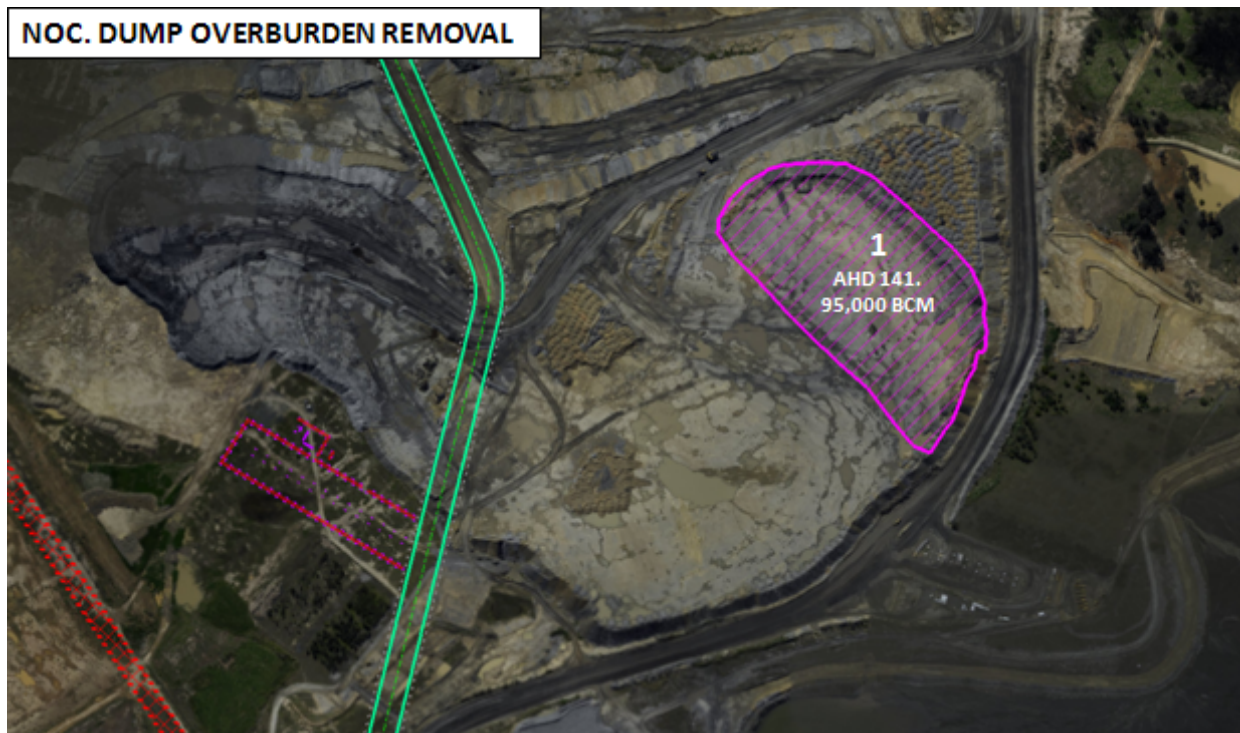
8. Appendices

The information contained in the attached appendices is Commercial-in-Confidence.

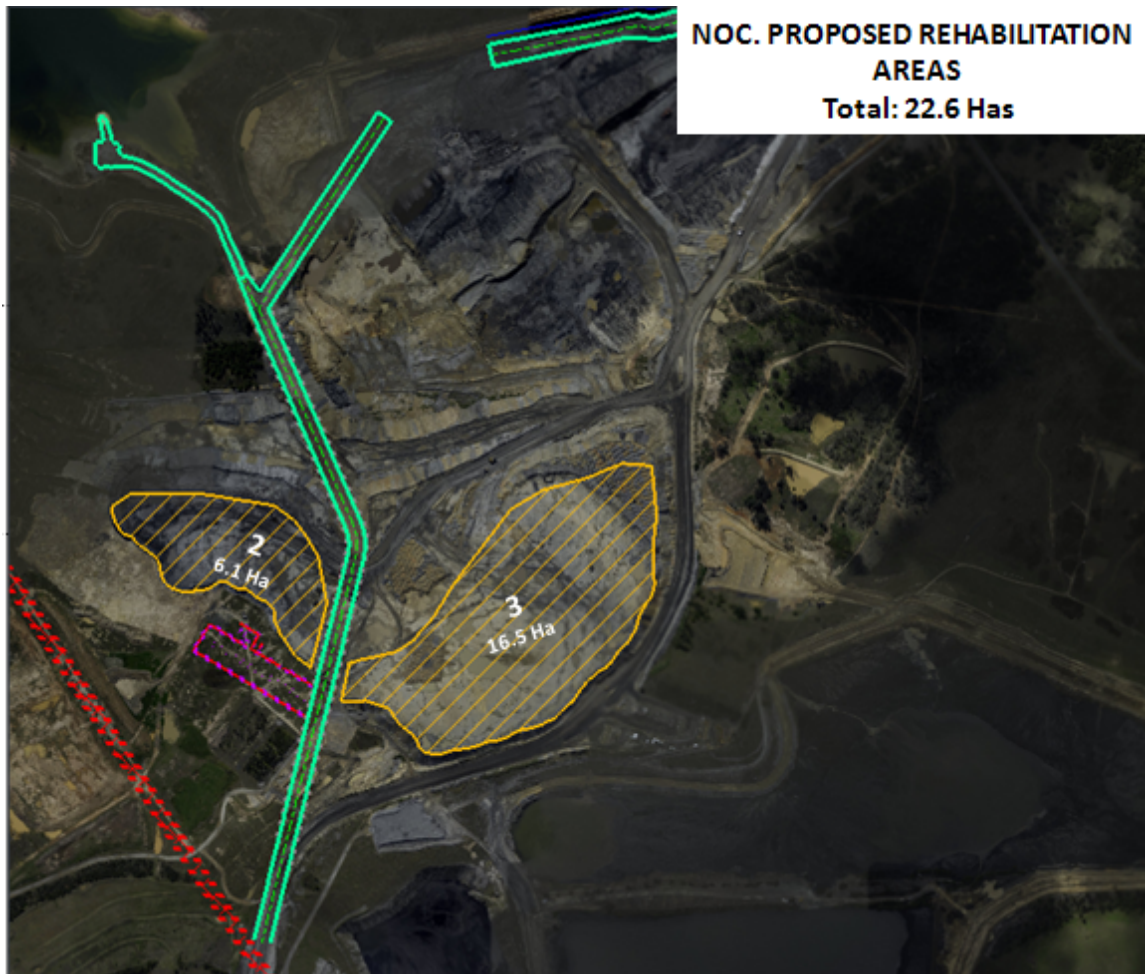
- Appendix 1: Short-term Dumping Strategy – this appendix includes maps and technical details to support Vale’s preferred short-term dumping strategy outlined in section 4.
- Appendix 2: Resolution of Non-compliance Issues – this appendix explains in detail the response to the non-compliance issues and requested changes.
- Appendix 3: Options Studied for area and volume potential for ex-pit and in-pit dumping – this appendix provides an overview of the options considered by Vale in determining its preferred short-term dumping strategy
- Appendix 4: Vale Integra Website Content Sitemap – this appendix provides a site map of Integra’s new website

Appendix 1 – Short-term Dumping Strategy

Plan 1 - Overburden removal - short term strategy.



Plan 2 – Rehabilitation - short term strategy.



Plan 3 – Stage 1 Dumping - short term strategy.



- Area 4 (Red) – 462,000bcm
- Area 5 (Blue) – 78,367bcm
- Area 6 (Brown) – 144024bcm
- Area 7 (Orange) – 79,650bcm
- Area 8 (Green) – 291776bcm

Plan 4 – Stage 2 Dumping - short term strategy.

NOC. DUMP STAGE 2



Plan 5 – Stage 3 Dumping - short term strategy.

NOC. DUMP STAGE 3



Appendix 2 – Resolution of Non-compliance Issues

The following tables explain in detail the response to the non-compliance issues and requested changes.

Stage 1 – Short term Strategy no immediate modification required (Sept – Dec) NOC

ACTION TYPE	NON COMPLIANCE or ACTION REQUESTED	SUGGESTED ACTION	ON GOING ISSUE	TIMING PRIORITY	ASSUMPTIONS/NOTES	ANY CHANGES TO EA, MOP or Other
Overburden Removal	Current material already out of compliance	Removal of the material from NOC dump site Area 1 that is above the 141AHD level ~ 95k to be removed	The removal is only down to the 141AHD level as first pass. If minor modification approved further removal will not be necessary	Can start immediately as this material can be used for tailings dam augmentation – Completed by end 2011		
Rehabilitation	Current available areas	Rehabilitation can start immediately on Area 2. A total area of 6.1Ha	No ongoing issue	Can start immediately	- final land form rehab	Y – MOP Y – Management plans
Dumping	Remaining dump space available to 135AHD	Areas 4-5-6-7-8 have been nominated for dumping that comply with current EA	Space is very limited and calculations have minimal error margins therefore space exhausted early December 2011, existing dump will remain at 141RL requiring minor modification	Occurring	Dump volumes include a 20% swell factor applied	Y – Minor EA modification Y – MOP Y – Management plans

Stage 2 – Short term Strategy with minor modification accepted by DP&I – (AHD141) NOC

Action type	NON COMPLIANCE or ACTION REQUESTED	SUGGESTED ACTION	ON GOING ISSUE	TIMING PRIORITY	ASSUMPTIONS/NOTES	ANY CHANGES TO EA, MOP or Other
Rehabilitation	After removal of excess material from dump site above 141AHD	Rehabilitation then can begin on Area 3. A total area of 16.5Ha	No ongoing issue	Dependent on removal of material in stage 1	- final land form rehab	Y – MOP Y – Management plans
Dumping	Proposed extension ex-pit dump to 141AHD	Areas 9 is nominated outside of current dump footprint	Space is very limited and calculations have minimal error margins therefore space exhausted during 2012 141RL & additional footprint requiring minor modification	After modification approved	- Temporary dump height to 141AHD until material is needed to cap tailings dam 1 & 2. Estimated capping 2018 - relocation of the current crib room area and other minor infrastructure relocation	Y – Minor EA modification Y – MOP Y – Management plans
Dumping	Capping of Tailings Dam	Area 9, Capping TD3 to 120AHD	Capping the Tailing Dam 3. Timing for when it is needed.		- TD 3 first cap is to the height of the dam walls. Further lift is stage 3 to 135AHD	Y – MOP Y – Management plans
Dumping	2 nd Lift on TD3 to 141AHD	Area 9 lifting TD3 to 141AHD	Capping the Tailing Dam 3. Timing for when it is needed.		- TD 3 2nd lift is to the height 141AHD This can be used for capping TD1&2	Y – MOP Y – Management plans
Dumping	Inpit dumping	Area 10 has no offset between dump and side wall to maximise dump space	Assuming a working space between dump toe and coal face of 200m For further expansion to the north this material will have to be rehanded or a barrier pillar designed	This progress as the pit advances	- Geotechnical high level review conducted and floor preparation required before dumping. Further detailed study has been action with expected report before end of year The location of access may impact the rehabilitation option for in pit dumping	Y – MOP

Stage 3 – Short term Strategy with complex modification accepted – (Bio-Diversity Area)

Action type	NON COMPLIANCE or ACTION REQUESTED	SUGGESTED ACTION	ON GOING ISSUE	TIMING PRIORITY	ASSUMPTIONS/NOTES	ANY CHANGES TO EA, MOP or Other
Dumping	Extension to ex-pit Dumps - Area 11	Area 11 Extending into the current Bio-Diversity area east.	Timing and replacement of Bio-diversity offset areas		Bio-diversity area will be replaced	Y – Complex modification to EA Y – MOP Y – Management plans

Appendix 3 – Options Studied for area and volume potential for ex-pit and in-pit dumping.

The following table provides an overview of the options considered by Vale.

Option	CONTROL HEIGHT & POSITION	Volume M bcm	COMMENT
Stage 1 Dumping	135AHD	1.05	Stage 1
Stage 2 Dumping Out of Pit	135AHD	1.7 (includes stg 1)	
Stage 2 Dumping Out of Pit	141AHD	3.0 (Includes stg 1)	Stage 2
Stage 2 Dumping Out of Pit	145AHD	3.5 (Includes stg1)	Too much rehandle to return to 135AHD
Stage 2 Dumping Out of Pit	Tailings Dam capping to 125AHD	1.2	Stage 2
Stage 2 Dumping In Pit	30m offset 102AHD	2.8	
Stage 2 Dumping In Pit	30m offset 115AHD	3.16	
Stage 2 Dumping In Pit	0m offset 90AHD (SCR)	3.39	
Stage 2 Dumping In Pit	0m offset 95AHD	5.79	Stage 2
Stage 2 Dumping Out of Pit	2 nd lift Tailings Dam to 141AHD	2.3	Stage 2
Stage 3 Dumping Out of Pit	Bio-Diversity Area	3.2	Stage 3 AHD135 and final land form

Summarised Options for Total Dump Space for Short Term Strategy – Stages 2&3

Option Utilising the Pit Floor Space Available end of 2012	Volume M bcm	Stages Nominated
In pit with offset and Area 9 to 141AHD	6.39	
In pit with offset and Area 9 to 145AHD	6.89	
In pit without offset Area 9 to 141AHD	9.99	Stage 2
In pit without offset Area 9 to 145AHD	10.49	
In pit without offset Area 9 to 141AHD+ Area 11 (BioDiv)	15.49	Stage 3

Dump Study Staging Detail

The following table provides a detailed overview of dumping volumes and timing for the duration of the short-term dumping strategy.

Year	2012 Budget OB movement	Ex-pit Dump	In-pit Dump	Main dumps utilised:
2011	0.9	0.9		Stage 1
2012	4.5	2.5	2.0	Stage 2 (141AHD; inpit - 102AHD)
2013	5.2	0.8	4.4	Stage 2 (141AHD; inpit - 115AHD; TD3 - 125AHD)
2014	5.7		5.7	Stage 2 (inpit - 135AHD) & 200m pit advance
Q1 2015	1.0		1.0	Stage 2 (inpit - 135AHD) & 200m pit advance
2015 rem	est 4.8		2.3	avail dump space: 2.9 (inpit - 135AHD & 300m advance)

Nb. Volumes provided in the above table are M bcm.

The assumptions used to develop the above information are as follows:

- The progression of the in-pit dumping is based on 2012 Budget sequence for NOC - if this sequences changes this will impact dumping sequence
- Post 2013 there is a high reliance on in-pit dumping that is very schedule-dependent - this is a risk to pit development
- 2015 volume is estimated from LOM graphs
- All volumes assume 20% swell
- 200m advancing face offset assumed in which access is generated. If access is required in the dump areas - volumes will be reduced. The location of access may impact the rehabilitation option for in pit dumping
- 200m advancing face offset is slightly reduced in Q1 2015 due to additional in-pit dump volume required throughout Q1
- All dumps are designed at angle of repose, however crests are designed at final rehabilitation location.
- In-pit dumping is reliant of floor preparation, as outlined in geotechnical recommendations

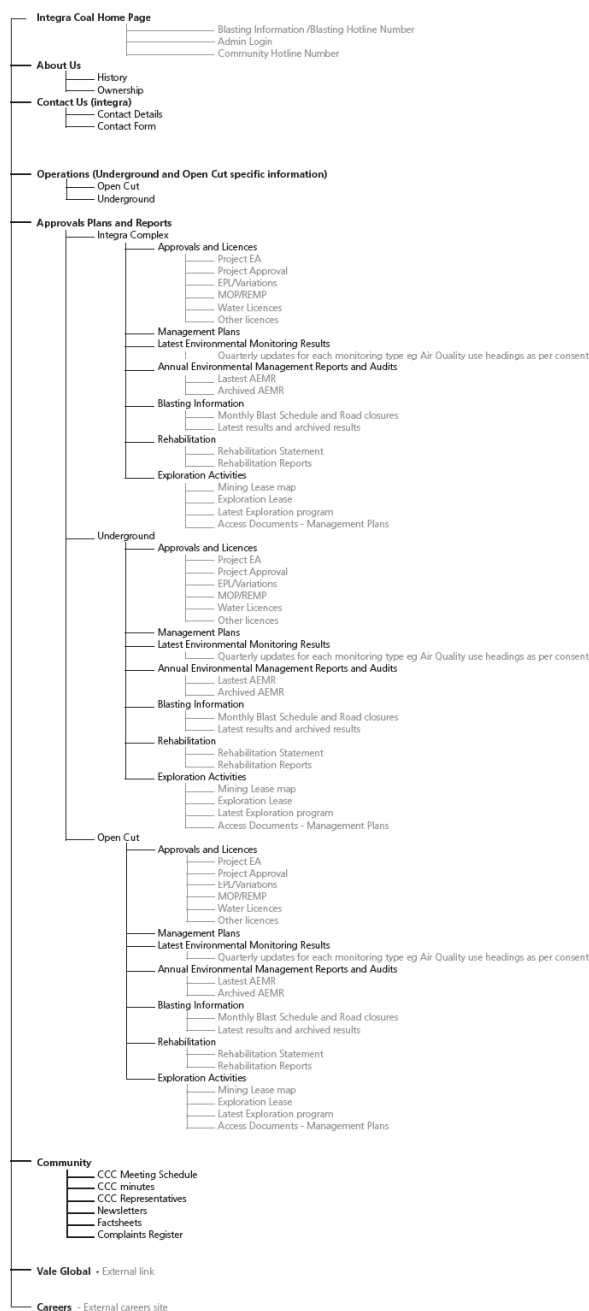
Appendix 4 – Vale Integra Website Content Site Map

This appendix contains:

- Detailed site map outlining the content structure of the new Vale Integra website



Sitemap





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