



Warkworth Continuation 2014

2

Environmental Impact Statement

Prepared for Warkworth Mining Limited | June 2014

VOLUME 2 — Appendices A to G



**COAL
&
ALLIED**

Managed by Rio Tinto Coal Australia



EMM
EMGA Mitchell McLennan

VOLUME 1 — MAIN REPORT

Executive Summary

Chapter 1	Context
Chapter 2	The proposal
Chapter 3	Proposal need
Chapter 4	Improvements and differences from the Warkworth Extension 2010
Chapter 5	The applicant and assessment requirements
Chapter 6	Existing operations
Chapter 7	Legislative considerations
Chapter 8	Stakeholder engagement
Chapter 9	Economics
Chapter 10	Noise and vibration
Chapter 11	Air quality and greenhouse gas
Chapter 12	Ecology
Chapter 13	Final landform and rehabilitation
Chapter 14	Land and soils capability
Chapter 15	Visual amenity
Chapter 16	Groundwater
Chapter 17	Surface water
Chapter 18	Aboriginal cultural heritage
Chapter 19	Historic heritage
Chapter 20	Traffic and transport
Chapter 21	Social assessment
Chapter 22	Environmental management and commitments
Chapter 23	Design considerations and alternatives
Chapter 24	Justification and conclusion

Abbreviations

References

VOLUME 2 — Appendices A to G

Appendix A	Schedule of land
Appendix B	Study team
Appendix C	Surrounding residences and assessment locations
Appendix D	Secretary's requirements
Appendix E	Economic study
Appendix F	Noise and vibration study
Appendix G	Air quality and greenhouse gas study

VOLUME 3 — Appendix H

Appendix H	Ecology study
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VOLUME 4 — Appendices I to L

Appendix I	Soil study
Appendix J	Visual amenity study
Appendix K	Groundwater study
Appendix L	Surface water study

VOLUME 5 — Appendices M to N

Appendix M	Aboriginal cultural heritage study
Appendix N	Historic heritage study

VOLUME 6 — Appendices O to R

Appendix O	Traffic and transport study
Appendix P	Social impact assessment
Appendix Q	Rehabilitation performance/completion criteria
Appendix R	Waste management strategy information

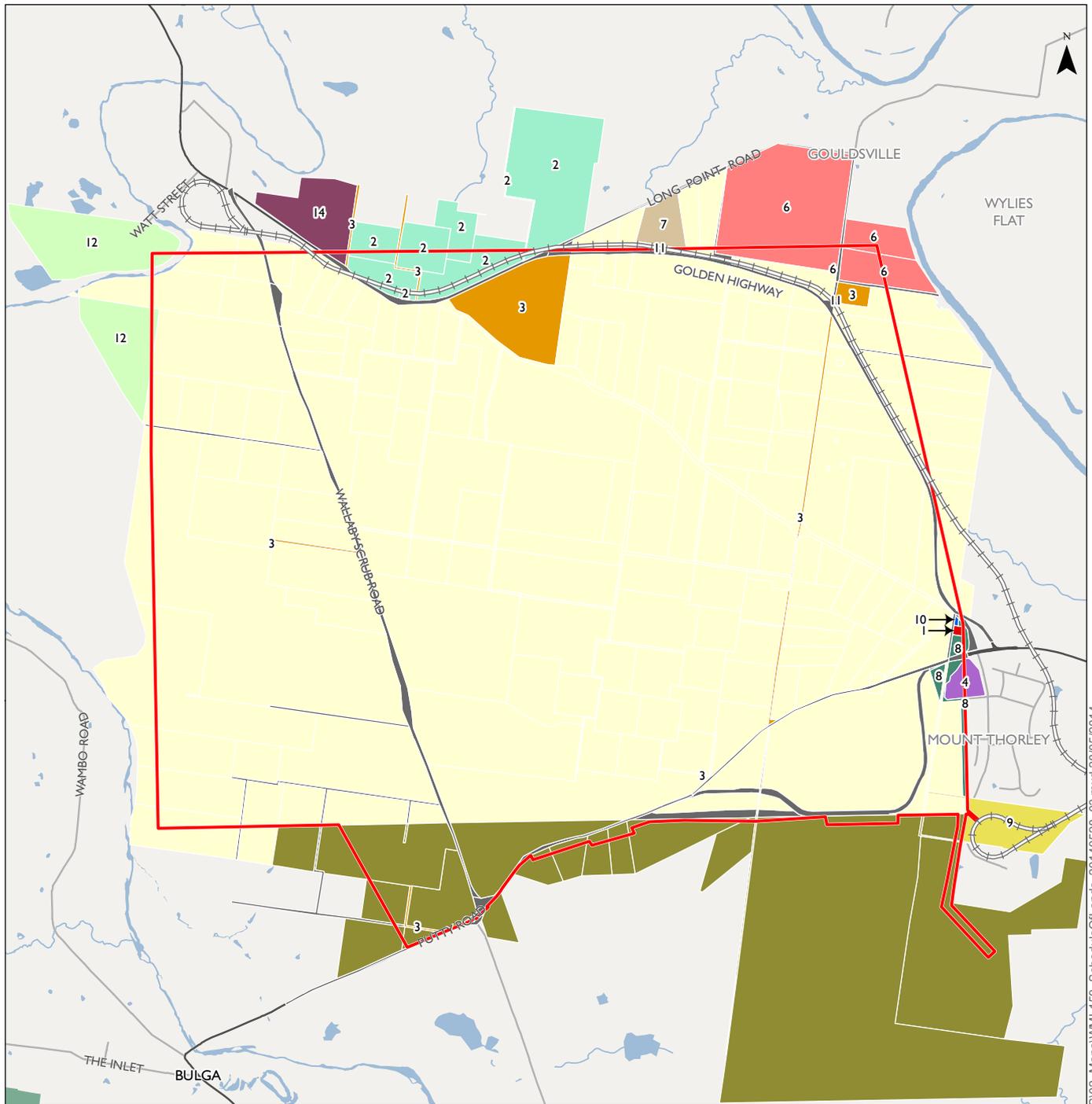
Appendix A

Schedule of land



Appendix A — Schedule of land

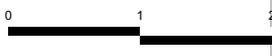
A



KEY

12	Property ID (refer to Schedule of Lands table)		Ausgrid		State Rail Authority of NSW
	Proposed Warkworth Mine development consent boundary		Coal & Allied Operations Pty Limited		Trustees of the church property for the diocese of Newcastle
	Major road		Crown Land / State of NSW		Wambo Coal Terminal Pty Limited
	Local road		Daracon Engineering Pty Limited		Wambo Mining Corporation Pty Limited
	Rail line		Miller Pohang Coal Company Pty Limited		Warkworth Mining Limited
	Waterways		Peter Glen Stuart		Xstrata Coal (NSW) Pty Limited
	NPWS reserve		Redbank Project Pty Limited		Singleton Shire Council
	State forest		Singleton Shire Council		Road

Source: EMU (2014); GA (2014); RTGA (2014)



GDA 1994 MGA Zone 56

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ID	LOT	DP	OWNER
	3	1026900	Road
	4	1026900	Road
	10	1121154	Road
1	40	587922	Ausgrid
2	146	970755	Coal & Allied Operations Pty Limited
2	143	755267	Coal & Allied Operations Pty Limited
2	135	755267	Coal & Allied Operations Pty Limited
2	2	129806	Coal & Allied Operations Pty Limited
2	4	113342	Coal & Allied Operations Pty Limited
2	142	755267	Coal & Allied Operations Pty Limited
2	1	129808	Coal & Allied Operations Pty Limited
2	1	129806	Coal & Allied Operations Pty Limited
3	1	1086834	Crown Land / State of NSW
3	2011	1137289	Crown Land / State of NSW
3	3	705493	Crown Land / State of NSW
3		0	Crown Land / State of NSW
3		0	Crown Land / State of NSW
3		0	Crown Land / State of NSW
3		0	Crown Land / State of NSW
4	372	1026537	Daracon Engineering Pty Limited
5	271	600747	Miller Pohang Coal Company Pty Limited
5	1	42614	Miller Pohang Coal Company Pty Limited
5	99	755270	Miller Pohang Coal Company Pty Limited
5	551	569597	Miller Pohang Coal Company Pty Limited
5	17	658927	Miller Pohang Coal Company Pty Limited
5	3	42614	Miller Pohang Coal Company Pty Limited
5	8	247340	Miller Pohang Coal Company Pty Limited
5	19	247339	Miller Pohang Coal Company Pty Limited
5	6	587986	Miller Pohang Coal Company Pty Limited
5	61	755270	Miller Pohang Coal Company Pty Limited
5	9	247340	Miller Pohang Coal Company Pty Limited
5	7	247340	Miller Pohang Coal Company Pty Limited
5	272	600747	Miller Pohang Coal Company Pty Limited
5	271	260663	Miller Pohang Coal Company Pty Limited
5	2	610376	Miller Pohang Coal Company Pty Limited
5	5	247340	Miller Pohang Coal Company Pty Limited
5	273	260663	Miller Pohang Coal Company Pty Limited
5	341	612684	Miller Pohang Coal Company Pty Limited
5	1	43422	Miller Pohang Coal Company Pty Limited
6	74	755267	Peter Glen Stuart
6	1	910550	Peter Glen Stuart

ID	LOT	DP	OWNER
6	75	755267	Peter Glen Stuart
6	126	665628	Peter Glen Stuart
7	450	1119428	Redbank Project Pty Limited
8	5	1026900	Singleton Shire Council
8	28	255730	Singleton Shire Council
8	371	1026537	Singleton Shire Council
8	29	255730	Singleton Shire Council
9	6	251238	State Rail Authority of NSW
10	2	602169	Trustees of church property for the diocese of Newcastle
11	2	1086834	Wambo Coal Terminal Pty Limited
11	451	1119428	Wambo Coal Terminal Pty Limited
12	23	3030	Wambo Mining Corporation Pty Limited
12	7	3030	Wambo Mining Corporation Pty Limited
13	360	1135647	Warkworth Mining Limited
13	220	1135537	Warkworth Mining Limited
13	99	755267	Warkworth Mining Limited
13	350	1135536	Warkworth Mining Limited
13	35	260056	Warkworth Mining Limited
13	19	113342	Warkworth Mining Limited
13	B	182301	Warkworth Mining Limited
13	162	755267	Warkworth Mining Limited
13	18	113342	Warkworth Mining Limited
13	105	755267	Warkworth Mining Limited
13	16	113342	Warkworth Mining Limited
13	17	113342	Warkworth Mining Limited
13	102	755267	Warkworth Mining Limited
13	154	755267	Warkworth Mining Limited
13	91	755267	Warkworth Mining Limited
13	A	182301	Warkworth Mining Limited
13	103	755267	Warkworth Mining Limited
13	7	248570	Warkworth Mining Limited
13	1	248570	Warkworth Mining Limited
13	1	705493	Warkworth Mining Limited
13	35	755270	Warkworth Mining Limited
13	24	755270	Warkworth Mining Limited
13	272	260663	Warkworth Mining Limited
13	140	248186	Warkworth Mining Limited
13	21	113342	Warkworth Mining Limited
13	129	755267	Warkworth Mining Limited
13	166	657481	Warkworth Mining Limited
13	16	755267	Warkworth Mining Limited

ID	LOT	DP	OWNER
13	6	113342	Warkworth Mining Limited
13	13	113342	Warkworth Mining Limited
13	179	755267	Warkworth Mining Limited
13	138	248186	Warkworth Mining Limited
13	1B	37572	Warkworth Mining Limited
13	22	113342	Warkworth Mining Limited
13	48	755267	Warkworth Mining Limited
13	189	755267	Warkworth Mining Limited
13	3	43383	Warkworth Mining Limited
13	203	704466	Warkworth Mining Limited
13	200	755267	Warkworth Mining Limited
13	1	227280	Warkworth Mining Limited
13	2	227280	Warkworth Mining Limited
13	3	227280	Warkworth Mining Limited
13	178	755267	Warkworth Mining Limited
13	132	755267	Warkworth Mining Limited
13	6	245850	Warkworth Mining Limited
13	8	245850	Warkworth Mining Limited
13	155	755267	Warkworth Mining Limited
13	1	326244	Warkworth Mining Limited
13	1	245850	Warkworth Mining Limited
13	3	245850	Warkworth Mining Limited
13	137	755267	Warkworth Mining Limited
13	1	129800	Warkworth Mining Limited
13	152	755267	Warkworth Mining Limited
13	21	625709	Warkworth Mining Limited
13	4	43383	Warkworth Mining Limited
13	2	827333	Warkworth Mining Limited
13	3	129811	Warkworth Mining Limited
13	8	246201	Warkworth Mining Limited
13	20	113342	Warkworth Mining Limited
13	36	260056	Warkworth Mining Limited
13	139	248186	Warkworth Mining Limited
13	136	755267	Warkworth Mining Limited
13	71	755270	Warkworth Mining Limited
13	170	755267	Warkworth Mining Limited
13	165	755267	Warkworth Mining Limited
13	144	755267	Warkworth Mining Limited
13	6	248570	Warkworth Mining Limited
13	137	248186	Warkworth Mining Limited
13	143	573290	Warkworth Mining Limited

ID	LOT	DP	OWNER
13	1	949066	Warkworth Mining Limited
13	46	755267	Warkworth Mining Limited
13	15	113342	Warkworth Mining Limited
13	180	755267	Warkworth Mining Limited
13	131	248186	Warkworth Mining Limited
13	2	705493	Warkworth Mining Limited
13	134	755267	Warkworth Mining Limited
13	2	1097294	Warkworth Mining Limited
13	1	755267	Warkworth Mining Limited
13	168	755267	Warkworth Mining Limited
13	7	245850	Warkworth Mining Limited
13	156	755267	Warkworth Mining Limited
13	1	326245	Warkworth Mining Limited
13	197	657482	Warkworth Mining Limited
13	5	248570	Warkworth Mining Limited
13	11	246201	Warkworth Mining Limited
13	2	129822	Warkworth Mining Limited
13	131	755267	Warkworth Mining Limited
13	1	129819	Warkworth Mining Limited
13	2	129811	Warkworth Mining Limited
13	3	246201	Warkworth Mining Limited
13	6	247820	Warkworth Mining Limited
13	95	755267	Warkworth Mining Limited
13	93	755267	Warkworth Mining Limited
13	1	610376	Warkworth Mining Limited
13	104	755267	Warkworth Mining Limited
13	164	755267	Warkworth Mining Limited
13	2	804245	Warkworth Mining Limited
13	191	755267	Warkworth Mining Limited
13	97	755267	Warkworth Mining Limited
13	130	755267	Warkworth Mining Limited
13	5	113342	Warkworth Mining Limited
13	141	573290	Warkworth Mining Limited
13	184	755267	Warkworth Mining Limited
13	89	755267	Warkworth Mining Limited
13	132	248186	Warkworth Mining Limited
13	130	248186	Warkworth Mining Limited
13	27	755267	Warkworth Mining Limited
13	90	755267	Warkworth Mining Limited
13	10	113342	Warkworth Mining Limited
13	7	113342	Warkworth Mining Limited

ID	LOT	DP	OWNER
13	196	755267	Warkworth Mining Limited
13	150	755267	Warkworth Mining Limited
13	173	755267	Warkworth Mining Limited
13	2	245850	Warkworth Mining Limited
13	12	246201	Warkworth Mining Limited
13	5	246201	Warkworth Mining Limited
13	2	130264	Warkworth Mining Limited
13	1	129822	Warkworth Mining Limited
13	1	129812	Warkworth Mining Limited
13	1	129811	Warkworth Mining Limited
13	92	755267	Warkworth Mining Limited
13	25	755270	Warkworth Mining Limited
13	185	755267	Warkworth Mining Limited
13	161	755267	Warkworth Mining Limited
13	1	804245	Warkworth Mining Limited
13	182	755267	Warkworth Mining Limited
13	135	248186	Warkworth Mining Limited
13	142	573290	Warkworth Mining Limited
13	2	43383	Warkworth Mining Limited
13	12	113342	Warkworth Mining Limited
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13	144	573290	Warkworth Mining Limited
13	1	573286	Warkworth Mining Limited
13	47	1096589	Warkworth Mining Limited
13	1	176095	Warkworth Mining Limited
13	167	755267	Warkworth Mining Limited
13	111	755267	Warkworth Mining Limited
13	1	1097294	Warkworth Mining Limited
13	9	246201	Warkworth Mining Limited
13	5	245850	Warkworth Mining Limited
13	1	130264	Warkworth Mining Limited
13	151	755267	Warkworth Mining Limited
13	3	129819	Warkworth Mining Limited
13	2	129799	Warkworth Mining Limited
13	2	246201	Warkworth Mining Limited
13	11	113342	Warkworth Mining Limited
13	8	1026900	Warkworth Mining Limited
13	1	1041796	Warkworth Mining Limited
13	7	247820	Warkworth Mining Limited
13	96	755267	Warkworth Mining Limited
13	94	755267	Warkworth Mining Limited

ID	LOT	DP	OWNER
13	26	755270	Warkworth Mining Limited
13	87	755267	Warkworth Mining Limited
13	190	755267	Warkworth Mining Limited
13	841	531116	Warkworth Mining Limited
13	106	755267	Warkworth Mining Limited
13	110	755267	Warkworth Mining Limited
13	187	755267	Warkworth Mining Limited
13	1	130275	Warkworth Mining Limited
13	177	755267	Warkworth Mining Limited
13	157	755267	Warkworth Mining Limited
13	159	755267	Warkworth Mining Limited
13	10	246201	Warkworth Mining Limited
13	4	245850	Warkworth Mining Limited
13	120	1089243	Warkworth Mining Limited
13	2	129819	Warkworth Mining Limited
13	1	129799	Warkworth Mining Limited
13	1	246201	Warkworth Mining Limited
13	2	735566	Warkworth Mining Limited
13	12	1121154	Warkworth Mining Limited
13	22	625709	Warkworth Mining Limited
13	1	130276	Warkworth Mining Limited
13	14	113342	Warkworth Mining Limited
13	136	248186	Warkworth Mining Limited
13	5	43383	Warkworth Mining Limited
13	134	248186	Warkworth Mining Limited
13	172	755267	Warkworth Mining Limited
13	1	43383	Warkworth Mining Limited
13	133	248186	Warkworth Mining Limited
13	2	248570	Warkworth Mining Limited
13	4	658759	Warkworth Mining Limited
13	4	248570	Warkworth Mining Limited
13	11	1121154	Warkworth Mining Limited
13	63	755267	Warkworth Mining Limited
14	1	1043120	Xstrata Coal (NSW) Pty Limited

Appendix B

Study team



Appendix B — Study team

B

Table B.1 Study team

Role	Person	Organisation	Qualifications
Lead consultancy			
Project director	Luke Stewart	EMM	BAppSc (Hons)
Project manager	Duncan Peake	EMM	BSc (Hons)
Project coordinator	Andrew Wiltshire	EMM	BSc (Geography), PGDip (EnvMgt)
Contributing authors	Rachael Russell	EMM	BSc, MEnvP
	Rebecca Newell	EMM	BA (Hons Class 1)
	Cassandra Thompson	EMM	BSc, MAppSc (EnvSc)
	Kate Cox	EMM	BSc (Marine Science)
	Robert Janssen	EMM	BSc, DipBus
Graphics	Antony Edenhofner	EMM	BSc (Applied Economic Geography)
	Robyn Sharpe	Sharper Graphics	DipA(Graphic Design and Advertising)
Administrative support	Jamie Wharemate	EMM	-
Technical specialists			
Aboriginal cultural heritage	David Cameron	Rio Tinto Coal Australia	BA, BA(Hons), PhD (Economic History)
	Luke Goodwin	Central Queensland Cultural Heritage Management	BA(Hons), PhD
	Joel Deacon	Rio Tinto Coal Australia	BA (Hons)
Air quality	Aleks Todoroski	Todoroski Air Sciences	BE(Mech)
	Philip Henschke	Todoroski Air Sciences	BSc
Ecology	David Robertson	Cumberland Ecology	BSc (Hons) PhD (Ecology)
Economics	Brian Fisher	BAEconomics	BScAgr (Hons I)
	Sabine Schnittger	BAEconomics	DipEc, MMatEcon
Groundwater	James Tomlin	AGE Consultants	BSc (Env Studies), MSc (Hydrogeology), CertSc (Geology)
	Doug McAlister	AGE Consultants	MAppSc, Hydrogeology
Historic Heritage	Tina King	RTCA	BA (Archaeology and Anthropology), BA (Hons), MA (Cultural Heritage)
	Holly Maclean	RTCA	BA (Archaeology and Anthropology), BSocSc (Hons, MA (Cultural Heritage)
Noise and vibration	Najah Ishac	EMM	MEngSc, BE (Mech)
	Daniel Weston	EMM	BEngTech (Audio), MDesSc (Acoustics)
	David Sallak	EMM	BE (Mech), Dip (Mech Eng)
Social and consultation	Brett McLennan	EMM	BTP (Hons), BSc (Hons)
	Michael Askew	EMM	Bbus (Management, Environmental & Urban), MEnvSt, PhD (Environmental Studies)
	Louise Askew	EMM	PhD (Geography), BSc (Hons)
Surface water	David Newton	WRM Water and Environment	BE (Hons), MEngSt, PhD (CPEng)
	Tallulah Kaegi	WRM Water and Environment	BE (Hons)
Traffic	Tim Brooker	EMM	PhD, BScEng
Visual	Esther Dickens	IDS	BA Design (Hons) (Landscape Architecture)

Appendix C

Surrounding residences and assessment locations



Appendix C — Surrounding residences and assessment locations



Assessment location ID	Property owner
1	Judith Leslie
2	Shayne Aaron Currie
3	Charleroi Pty Limited
4	Graeme O'Brien & Susann Florence O'Brien
5	Daniel Bruce Jones
6	Russell James Doidge, Trinetta Louise Reid
7	Darral Keith Margery & Annette Gaye Margery
8	Laurence Fletcher, Margaret Ann Fletcher
9	Donald Bruce Roser
10	Andrew Mark Robey, Kim Luanne Robey
11	Wambo Mining Corporation Pty. Limited
12	Ronald Alexander Corino, Pauline Rayner
13	Ilario Francisco Circosta, Maria Angela Circosta*
14	Karin Margaret Hunt
15	William Lindsay Gordon Slaney, Peta Slaney
16	Leona Ann Williams
17	George David Lianos, Honor Claire Lianos
18	Barry John Anderson, Melissa Gai Anderson
19	Denis Cyril Maizey, Elaine Margaret Maizey
20	Gregory William Banks, Marion Elizabeth Banks
21	Gregory William Banks, Marion Elizabeth Banks
22	Elizabeth Mackenzie
23	Peter Jason Kolatchew, Heidi Kolatchew
24	Ronald Garry Bailey, Fiona Susan Bailey
25	William George Joseph Lambkin, Dawn Lambkin*
26	Barbara Gae Harrison, Trevor Eric Harrison
27	Warkworth Mining Limited
28	Hubert George Upward
29	Ilario Francisco Circosta, Maria Angela Circosta*
30	Damien Michael Hanson, Danielle Louise Hanson
31	Gregory Malcolm Caban
32	Paul Mark Dunn, Susan Joy Urwin
33	Ian Norris Bartholomew, Annette Maria Bartholomew
34	Allan Clyde Lepisto, Nerida Lepisto
35	Lawrence Malcolm Caban, Rhonda Beryl Caban
36	Raymond Carl Powell
37	Gregory Paul Crowe
38	Benjamin John Street, Jami Ann Street
39	Gregory John Mcnaught
40	Margaret Player, John Maclachlan Player
41	Hubert George Upward
42	Mark Anthony Lancaster, Debbie Marie Lancaster
43	Geoffrey Allen Burgess, Betty Joy Burgess
44	Barry Fogwell
45	Adam Charles Cameron
46	Jason Phillip Horn
47	Philip Adamthwaite

Assessment location ID	Property owner
48	Brett James Gallagher, Rebecca Louise Gallagher
49	John Thompson, Delwyn Kay Jackson
50	Bradley Richard Sales, Sharon Ann Bellamy
51	Warkworth Mining Limited
52	Stewart James Mitchell, Marie Clare Mitchell
53	Robert Mclaughlin
54	Christopher Stanley Neville & Elizabeth Ann Neville
55	Robert John Evans
56	Leonard Walter Mclachlan, Noelene Rita Mclachlan
57	Paul William Harris, Tracey Anne Swindail
58	David Andrew Gregory
59	Warkworth Mining Limited
60	Vaughan Thomas Cagney, Candice Rose Albert
61	Darrell Stanley Kaizer
62	Dwi Octaviani
63	Margueriette Ann Henneberry, Paul Andrew Burgess
64	Dusko Dragicevic, Milan Dragicevic
65	Gordon Keith Grainger, Selma Rosalind Grainger
66	Michael Vivian Bendall, Sue-Ellen Bendall
67	Michael Shane Dawson & Suzana Dawson
68	Warkworth Mining Limited
69	Warkworth Mining Limited
70	Peter Francis Ritchie And Fiona Jennifer Ritchie
71	Robert Ian Hedley, Jan Maree Louis
72	Frank Henry Turnbull
73	Phillip Joseph Reid, Carol Reid
74	Ronald Guy Godyn, Anne-Marie Godyn
75	Lindsay Robert Smith, Jillian Maree Smith
76	The State Of New South Wales
77	William Joseph Kelly, Marie Joyce Kelly, Lawrence Kelly
78	Warkworth Mining Limited
79	Wambo Mining Corporation Pty. Limited
80	Dimitrious Vikas & Joy Mary Vikas
81	Agl Energy Limited
82	Stephen Glenn Williamson, Nicole Leanne Highett
83	Xstrata Coal Pty Limited
84	Mary Veronica Thompson
86	The State Of New South Wales
87	Andre Marc Renaud, Noela Mary Renaud*
89	Bryan Dudley Medhurst
90	Coal & Allied Operations Pty Limited
91	Wambo Coal Pty Limited
92	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
93	Coal & Allied Operations Pty Limited
94	Wambo Coal Pty Limited
95	Miller Pohang Coal Company Pty Limited
96	Wambo Mining Corporation Pty. Limited

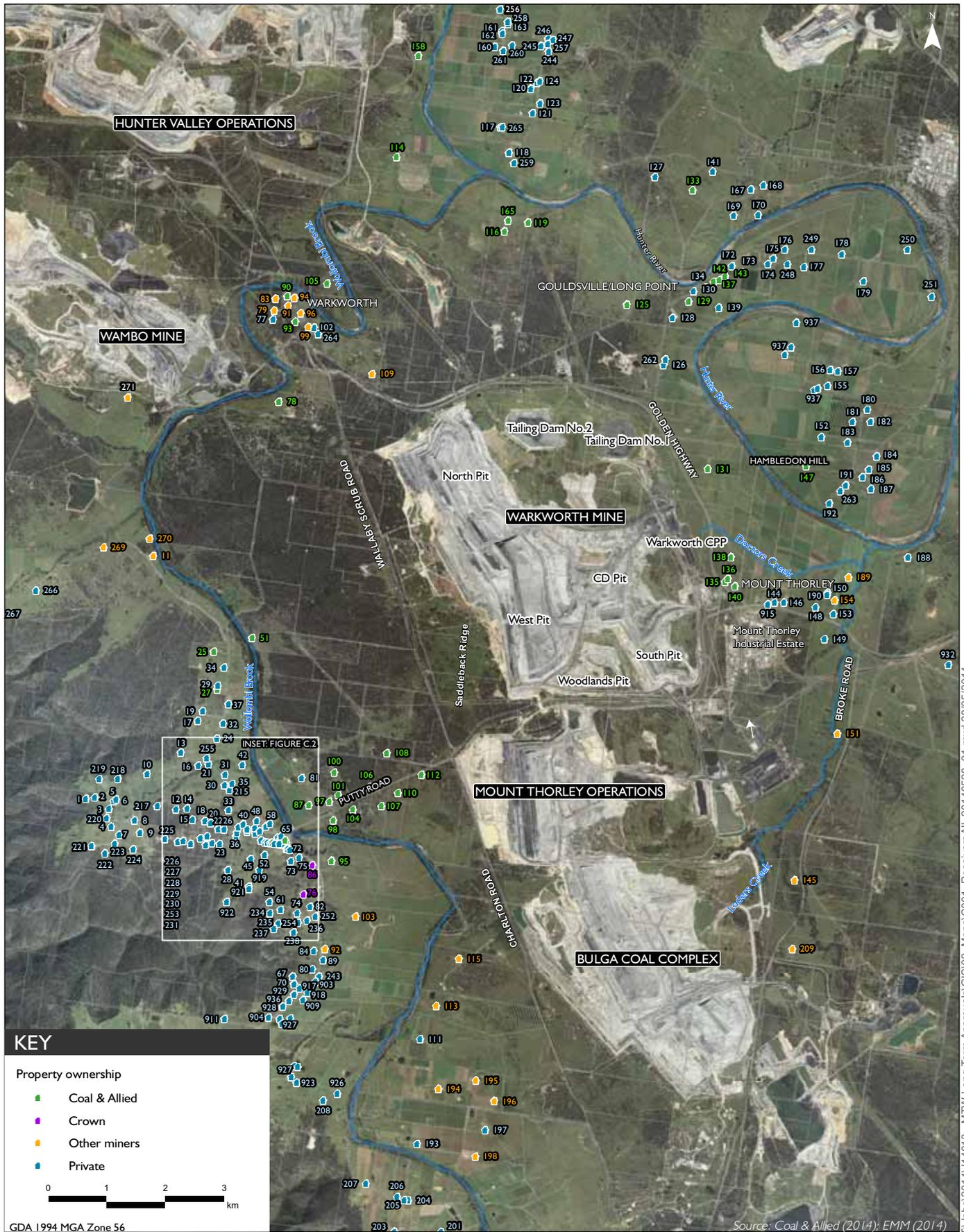
Assessment location ID	Property owner
97	Warkworth Mining Limited
98	Miller Pohang Coal Company Pty Limited
99	Wambo Coal Pty Limited
100	Miller Pohang Coal Company Pty Limited
101	Miller Pohang Coal Company Pty Limited
102	Brian Edward Kennedy, John Griffiths
103	Saxonvale Coal Pty. Limited, Nippon Steel Australia Pty. Limited
104	Miller Pohang Coal Company Pty Limited
105	Coal & Allied Operations Pty Limited
106	Miller Pohang Coal Company Pty Limited
107	Miller Pohang Coal Company Pty Limited
108	Miller Pohang Coal Company Pty Limited
109	Xstrata Coal (Nsw) Pty Limited
110	Miller Pohang Coal Company Pty Limited
111	Ian Wallace Russell
112	Miller Pohang Coal Company Pty Limited
113	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
114	Coal & Allied Operations Pty Limited
115	Saxonvale Coal Pty. Limited, Nippon Steel Australia Pty. Limited
116	Coal & Allied Operations Pty Limited
117	Phillip John Algie, Colleen Ann Maree Algie
118	Robert John Algie
119	Coal & Allied Operations Pty Limited
120	Russell John Wenham, Janelle Susan Wenham
121	Julie Gai Ernst, Gregory John Ernst
122	Stephen Douglas Edwards, Terri-Anne Howard, Joselyn Vida Clifton
123	Neil Robert Nelson, Glenda Joy Nelson
124	Stephen Douglas Edwards, Terri-Anne Howard, Joselyn Vida Clifton
125	Coal & Allied Operations Pty Limited
126	Peter Glen Stuart
127	Noel Francis Riley, Elaine Roslyn Riley
128	Warren John Welsh, Adam John Young
129	Coal & Allied Operations Pty Limited
130	Francescantonio Ventra, Joanne Ventra
131	Warkworth Mining Limited
133	Coal & Allied Operations Pty Limited
134	Andrew Arthur Barrett, Nicole Maree Kenny
135	Warkworth Mining Limited
136	Warkworth Mining Limited
137	Coal & Allied Operations Pty Limited
138	Warkworth Mining Limited
139	Kevin Denis Hartcher, Linda Anne Hartcher
140	Warkworth Mining Limited
141	Warren Thomas Barry, Lesley Una Barry
142	Coal & Allied Operations Pty Limited
143	Coal & Allied Operations Pty Limited
144	Jason Cyril Rumbel, Rebecca Ruth Rumbel

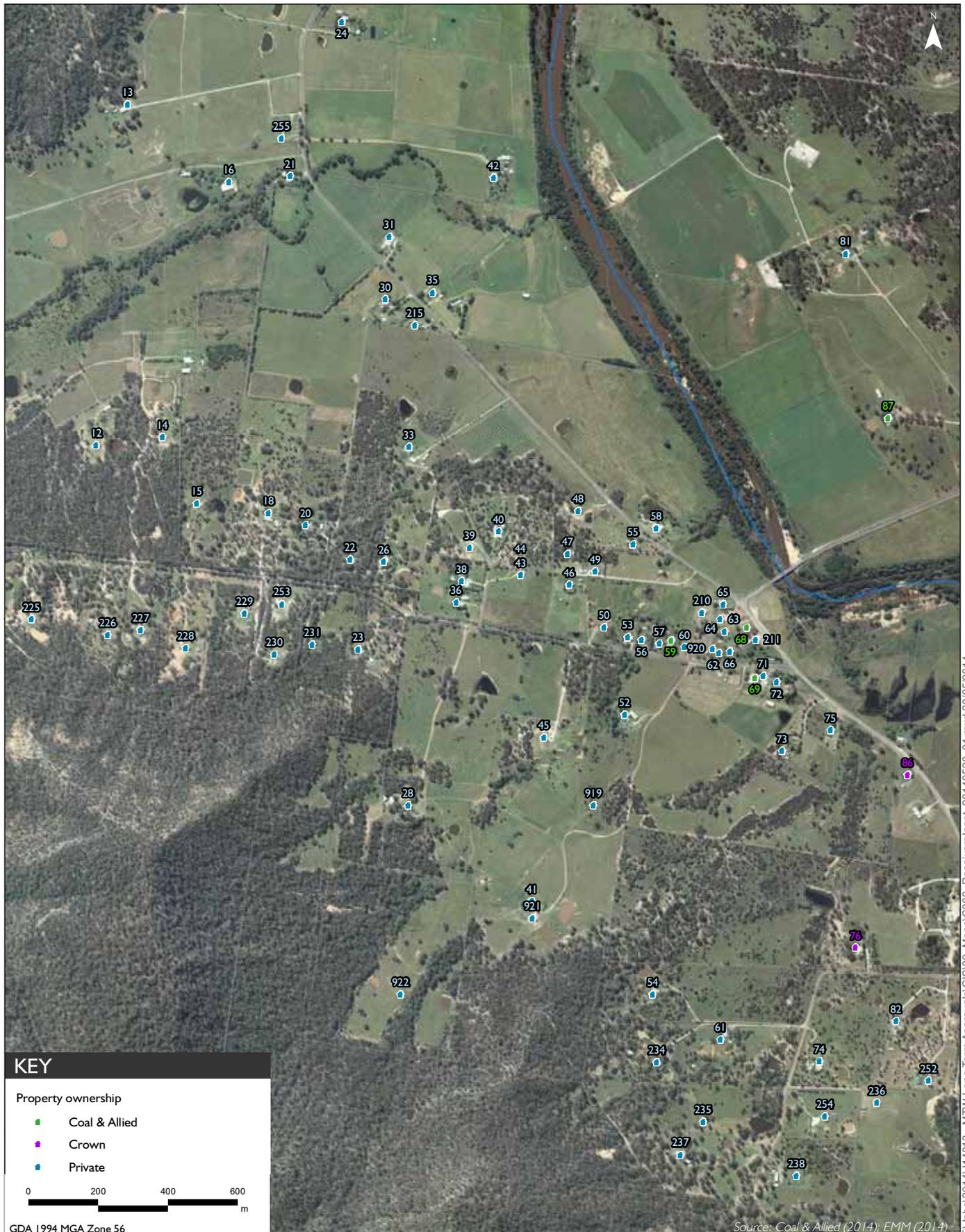
Assessment location ID	Property owner
145	Saxonvale Coal Pty. Limited, Nippon Steel Australia Pty. Limited
146	Paul Henry Russell
147	Warkworth Mining Limited
148	Dorothy Clare Russell
149	Timothy Peter Hedley
150	Keith David Isaac, Sharon Ann Isaac
151	Bulga Coal Management Pty Limited
152	Graham Edwin Berry, Elizabeth Anne Berry
153	Thomas William Kermode, Kathleen May Kermode
154	Bulga Coal Management Pty Limited
155	Trevor Keith Berry, Graham Edwin Berry
156	Jean Mary O'Hara
157	Jean Mary O'Hara
158	Coal & Allied Operations Pty Limited
160	Elizabeth Stuart Bowman
161	Wyoming Holsteins Pty Limited
162	Wyoming Holsteins Pty Limited
163	Wyoming Holsteins Pty Limited
165	Coal & Allied Operations Pty Limited
167	Nathan James Laing
168	Stuart Francis Nichol Wright, Pamela Lynn Wright
169	Harold Douglas Hobden
170	John Marcheff
172	John Stuart Gough, Lynette Jean Gough
173	Michael John Wellard, Faye Denise Wellard
174	Margaret Anne Neal
175	Bradley John Halter
176	Michael Raymond Mapp, Shirley Maree Mapp
177	Greig Andrew Delaney
178	Craig Ian Flissinger, Catherine Anne Flissinger
179	Tickalara Pty. Limited
180	Bruce Graham Moore
181	David Charles Vassallo, Sheree Ann Vassallo
182	Robert Francis Holstein And Andrea Terry Holstein
183	Paul Anthony Cavanough, Jacinta Jade Dawkins
184	Campbell Stuart Ball And Gail Agnes Ball
185	Leonard Dale Franks
186	Leonard Dale Franks
187	Keith Heuston Pty. Limited
188	Comserve (No.932) Pty Ltd
189	Bulga Coal Management Pty Limited
190	Keith David Isaac, Sharon Ann Isaac
191	Robert John Vidler, Coral May Vidler
192	Jean Mary O'Hara
193	Robert Kennedy
194	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
195	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited

Assessment location ID	Property owner
196	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
197	Robert Kennedy
198	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
199	Adrian Garton, Susan Jean Garton
200	Karren Anne Mccraw, Kenneth Ian Mccraw
201	Richard James Owens
202	Richard James Owens
203	Grapemen Holdings Pty Limited
204	Brenda Joan Tanner
205	Victoria Ann Foster
206	Theo Poulos, Maria Poulos
207	John Stephen Tulloch
208	Cybele Genevieve Orton
209	Saxonvale Coal Pty Limited, Nippon Steel Australia Pty Limited
210	Meria Violet Ford
211	Mike Dean Silk, Antoinette Silk
215	Allan Wayne Louis, Cheryl Anne Louis
217	Packtron Packaging Pty Limited
218	Phillip John Haerse, Elizabeth Rae Haerse
219	Philip Geoffrey Carroll
220	George Jiri Tlaskal
221	Christina Mary Metlikovec
222	John Vincent Putland
223	Andrew Glenn Upward
224	Rex Wayne Davis, Heather Anne Davis
225	Anthony and Trudie Seibel – Barnes
226	Neale Mccallum, Julie Marie Mcnaughton
227	Ian Wyn Jones, Karen Michelle Jones
228	Jason Peter Passlow, Belinda Louise Lee
229	Maurice Francis Chapman, Nellie Vera Chapman
230	Paul Dermot Byrne O'Toole, Melissa Jane O'Toole
231	Mark Mcalpin Roser, Nicole Roser
234	Robert John Bridge, Kylie Terese Bridge
235	Garrett James Walters & Clare Joanne Gowans
236	Scott Francis Ryan
237	Leslie Carol Krey
238	Raymond George Caban, Kathryn Louise Caban
243	John Patrick Cant, Cherie Margaret Cant
244	Todd Anthony Mills, Sharron Ann Mills
245	Chriss Ivan Maskey
246	Paul Raymond Burley, Catherine Maree Burley
247	Tony Zanardi, Sandra Maree Zanardi
248	Keith Joseph Horne
249	Thomas William Watson, Betty Watson
250	John Michael Woods
251	Frederick John & Carole Maria Flinn
252	Jaques Family Investments Pty Limited

Assessment location ID	Property owner
253	Stuart Edward Reakes
254	Peter William Shore & Melanie Louise Shore
255	Ilario Francisco Circosta, Maria Angela Circosta*
256	Bruce Eric Moxey, Thea Anne Moxey
257	Robert John Algie
258	Wyoming Holsteins Pty Limited
259	Robert John Algie
260	Wyoming Holsteins Pty. Limited
261	Wyoming Holsteins Pty. Limited
262	Peter Glen Stuart
263	John Klasen, Ruth Anne Klasen
264	George Robert Miller
265	Phillip John Algie, Colleen Ann Maree Algie
266	Ronald Wayne Fenwick
267	Kenneth Max Brosi
268	Kenneth Max Brosi, Julie Anne Brosi & Pauline June Mcloughlin
269	Wambo Mining Corporation Pty Limited
270	Wambo Mining Corporation Pty Limited
271	Wambo Mining Corporation Pty Limited
903	Adam John Baker
904	Allan Mark Brasington, Judith Anne Brasington
905	Cameron Michael Turner, Melissa Jayne Harris
909	Emanuel Victor Vassallo
911	Gary Dale Harris
915	Jason Cyril Rumbel, Rebecca Ruth Rumbel
917	John Robert Lamb
918	Joseph Vassallo, Doris Vassallo
919	Kenneth Neil Cameron
920	Lindsay Gordon Harris, Jillian May Ferguson
921	Melanie Caban, Keiran Lionel Caban
922	Melanie Evelyn Upward
923	Michelle Maria Brennan
926	Paul William Mackay, Suzanne Elizabeth Mackay
927	Phillip John Gunter, Leona Mary Gunter
928	Sarah Elizabeth Purser, Stirling Owen Keayes
929	Simon James Beavis
932	Stephen Dennis Tipping
936	Thomas Charles Jackson, Susan Gai Jackson
937	Trevor Keith Berry, Graham Edwin Berry

** at date of document publication private residence status still being determined on land transfer and have been treated as mine owned properties in the EIS.*





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Appendix D

Secretary's requirements



Appendix D — Secretary's requirements

D



Mr Mark Nolan
Principal Advisor Project Approvals NSW
Health, Safety, Environment and Communities
Rio Tinto
PO Box 315
SINGLETON NSW 2330

Dear Mr Nolan

**State Significant Development - Secretary's Requirements
Warkworth Continuation Project (SSD 6464)**

I have attached the Secretary's requirements for the preparation of an Environmental Impact Statement (EIS) for the Warkworth Continuation Project.

These requirements are based on the information you have provided to date, and have been prepared in consultation with the relevant government agencies. The agencies' comments are attached for your information (see Attachment 2).

Please note that the Department may alter these requirements at any time, and that you must consult further with the Department if you do not lodge a development application and EIS for the project within the next two years.

Please contact the Department at least two weeks before you plan to submit the development application and EIS for the project. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy and CD-ROM) of the EIS required.

It is important for you to recognise that the Department will review the EIS for the project before putting it on public exhibition, and make you submit an amended EIS if it fails to adequately address these requirements.

Yours sincerely

David Kitto
Director
Mining Projects
As delegate of the Secretary

Secretary's Environmental Assessment Requirements

State Significant Development

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

Application Number	SSD 6464
Proposal	<p>The Warkworth Continuation Project, which includes:</p> <ul style="list-style-type: none">• the continuation of existing and approved development on site;• extending approved open cut mining operations further west;• developing a range of associated infrastructure to support this extension;• maintaining maximum coal extraction rates at 18 million tonnes of run of mine coal a year;• exporting coal, tailings and overburden to the Mt Thorley mine;• water sharing with other mines;• exporting sand and gravel from the site; and• progressively rehabilitating the site.
Location	Approximately 15 km southwest of Singleton
Applicant	Warkworth Mining Limited
Date of Issue	22 May 2014
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none">• a full description of the development, including:<ul style="list-style-type: none">– the resource to be extracted, demonstrating efficient resource recovery within environmental constraints;– the mine layout and scheduling;– minerals processing;– a waste (overburden, tailings, etc.) management strategy, dealing with the EPA's requirements (see Attachment 2);– a water management strategy, dealing with the EPA's and NSW Trade and Investment's requirements (see Attachment 2);– a rehabilitation strategy, dealing with NSW Trade and Investment's requirements (see Attachment 2); and– the likely interactions between the development and any other existing, approved or proposed mining development in the vicinity of the site;• a list of any approvals that must be obtained before the development may commence;• an assessment of the likely impacts of the development on the environment, focussing on the specific issues identified below, including:<ul style="list-style-type: none">– a description of the existing environment likely to be affected by the development, <u>using sufficient baseline data</u>;– an assessment of the likely impacts of all stages of the development, including any cumulative impacts, taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice;– a description of the measures that would be implemented to mitigate and/or offset the likely impacts of the development, and an assessment of:<ul style="list-style-type: none">○ whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented;○ the likely effectiveness of these measures; and

	<ul style="list-style-type: none"> ○ whether contingency plans would be necessary to manage any residual risks; – a description of the measures that would be implemented to monitor and report on the environmental performance of the development if it is approved; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; • consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>); and • the reasons why the development should be approved having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development. <p>While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development.</p> <p>In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by a signed report from a suitably qualified expert that includes an accurate estimate of the:</p> <ul style="list-style-type: none"> • capital investment value (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the development, including details of all the assumptions and components from which the capital investment value calculation is derived; and • jobs that would be created during each stage of the development.
<p>Specific Issues</p>	<p>The EIS must address the following specific issues:</p> <ul style="list-style-type: none"> • Noise & Blasting – including: <ul style="list-style-type: none"> - an assessment of the likely operational noise impacts of the development (including construction noise) under the <i>NSW Industrial Noise Policy</i>, paying particular attention to establishing accurate background noise levels in the surrounding area, the effect of removing Saddleback Ridge and the obligations in chapters 8 and 9 of the policy; - if a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities under the <i>Interim Construction Noise Guideline</i>; - an assessment of the likely road noise impacts of the development under the <i>NSW Road Noise Policy</i>; and - an assessment of the likely blasting impacts of the development on people, animals, buildings and infrastructure, and significant natural features, having regard to the relevant ANZEC guidelines; • Air – including: <ul style="list-style-type: none"> - an assessment of the likely air quality impacts of the development in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i> and the EPA's additional requirements (see Attachment 2); and - an assessment of the likely greenhouse gas impacts of the development, dealing with the EPA's requirements (see Attachment 2); • Biodiversity – including: <ul style="list-style-type: none"> - an assessment of the likely biodiversity impacts of the new development, having regard to the principles and strategies in the draft <i>NSW Biodiversity Offsets Policy for Major Projects</i> and the <i>Upper Hunter Strategic Assessment – Interim Policy</i>, using the Biodiversity Certification Assessment Methodology as amended by the Upper Hunter Strategic Assessment for credit calculation, and the Biobanking Assessment Methodology as amended by the Upper Hunter Strategic Assessment for calculating the credits of any

	<p>offsets;</p> <ul style="list-style-type: none"> - specific assessment of the likely impacts of the new development on the Warkworth Sands Woodland endangered ecological community; and - the provision of alternate offsets for the disturbance area approved under the 2003 development consent, using the Biodiversity Certification Assessment Methodology as amended by the Upper Hunter Strategic Assessment for credit calculation and the Biobanking Assessment Methodology as amended by the Upper Hunter Strategic Assessment for calculating the credits of any offsets; <ul style="list-style-type: none"> • Water – including: <ul style="list-style-type: none"> - an assessment of the likely impacts of the development on the quantity and quality of the region's surface and groundwater resources, having regard to the EPA's and NSW Trade and Investment's requirements (see Attachment 2); - an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users; and - an assessment of the likely flooding impacts of the development; • Land – including: <ul style="list-style-type: none"> - an assessment of the likely impacts of the development on the soils, land capability, and landforms (topography) of the site; and - an assessment of the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements in Clause 12 of <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>; • Heritage – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development having regard to OEH's requirements (see Attachment 2), and paying particular attention to the likely impacts on the Bulga Bora Ground, Great North Road, and former air strip on the site; • Traffic – including: <ul style="list-style-type: none"> - an assessment of the likely impacts of the closure of Wallaby Scrub Road, particularly on the provision of emergency services; and - an assessment of the likely traffic impacts of the development on the capacity, condition, safety and efficiency of the local and State road network, including the impacts associated with the potential tunnel under Putty Road and the haulage of sand and gravel from the site; • Visual – including an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to the removal of Saddleback Ridge, the creation of new landforms (overburden dumps, bunds, etc.), and minimising the lighting impacts of the development; • Public Safety – including an assessment of the likely risks to public safety off-site, paying particular attention to bushfire risks and the handling and use of any dangerous goods; • Social & Economic – including: <ul style="list-style-type: none"> - an assessment of the likely social impacts of the development (including perceived impacts), paying particular attention to any impacts on Bulga village; and - an assessment of the likely economic impacts of the development, paying particular attention to: <ul style="list-style-type: none"> ○ the significance of the resource; ○ economic benefits of the project for the State and region; and ○ the demand for the provision of local infrastructure and services.
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Consultation	<p>During the preparation of the EIS, you must consult with relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.</p>
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ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Noise & Blasting	
	NSW Industrial Noise Policy (EPA)
	NSW Road Noise Policy (EPA)
	Interim Construction Noise Guideline (EPA)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)
Air	
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
	Coal Mine Particulate Matter Control Best Practice – Site Specific Determination Guideline (EPA)
	Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	National Greenhouse Accounts Factors (Commonwealth)
Biodiversity	
	Draft NSW Biodiversity Offset Policy for Major Projects (OEH)
	BioBanking Assessment Methodology (OEH)
	Biodiversity Certification Assessment Methodology (OEH)
	Upper Hunter Strategic Assessment – Interim Policy (DP&E)
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW)
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
Water	
Water Sharing Plans	Hunter Unregulated and Alluvial Water Sources 2009
	Hunter Regulated River Water Source 2003
Groundwater	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW State Groundwater Quantity Management Policy (NOW)
	NSW Aquifer Interference Policy 2012 (NOW)
	Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
	NSW Government Water Quality and River Flow Objectives (EPA)
Surface Water	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
	Hunter River Salinity Trading Scheme (EPA)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)

	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (DECC)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control (EPA)
	Technical Guidelines: Bunding & Spill Management (EPA)
	Environmental Guidelines: Use of Effluent by Irrigation (EPA)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	NSW Guidelines for Controlled Activities (NOW)
Flooding	Floodplain Development Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Land	
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
Heritage	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DP&E)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (OEH)
	NSW Heritage Manual (OEH)
	Statements of Heritage Impact (OEH)
	Hunter Regional Environmental Plan 1989 (Heritage)
Traffic	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA) & relevant Austroads Standards
Public Safety	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Hazardous and Offensive Development Application Guidelines – Applying SEPP 33
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Resource	
	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC)
Waste	
	Waste Classification Guidelines (DECC)
Rehabilitation	
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Strategic Framework for Mine Closure (ANZMEC-MCA)
Environmental Planning Instruments - General	
	State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
	State Environmental Planning Policy (State and Regional Development) 2011
	State Environmental Planning Policy (Infrastructure) 2007
	Singleton LEP 2013

For *Attachment 2 Agency Correspondence* please refer to the Department of Planning and Environment's website at <http://www.planning.nsw.gov.au/>