Appendix AF – Contribution

Chapter no. or Appendix no.	Chapter name	Section	Staff member name and company	Qualifications and experience
Executive Summary	Executive Summary	All	Darren Holden ABM Resources	BSc Hons, MAusIMM, Managing Director, 19+ years
			Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Chapter 1	Introduction	All	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
	Regulatory environment		Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
		All Legislation Matrix for Twin Bonanza Project	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
Chapter 2 Appendix B			Jutta Zimmerman ABM Resources	Dip AQF, Dip Information Technology, Chief Financial Officer, Company Secretary, 20+ years
			Ashley Watson Piper Alderman	Partner Resources and Projects, LLB, 20 + years
	Project description	All	Brad Valiukas ABM Resources	BEng (Mining), Chief Operating Officer, 16+ years
Chapter 3			Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
			Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
Chapter 4	Project rationael and alternatives	EIS Chapter	Darren Holden ABM Resources	BSc Hons, MAusIMM, Managing Director, 15+ years
			Rebecca Richards ABM Resources	Geochemist/ Project Geologist,

Chapter no. or Appendix no.	Chapter name	Section	Staff member name and company	Qualifications and experience
				MSc Earth Sciences, 3.5 years
			Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
			Jutta Zimmerman ABM Resources	Dip AQF, Dip Information Technology, Chief Financial Officer, Company Secretary, 20+ years
Chapter 5	Risk assessment	EIS Chapter	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Chapter 5			Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
	Biodiversity	EIS Chapter Biodiversity Technical Report Biodiversity Management Plan	EcOz - Tom Reilly	Project Manager/Senior Environmental Consultant, BSc (Hons) MEIANZ
Chapter 6, Appendix C, Appendix D			EcOz - Dane Trembath	Senior Zoological Consultant, BSc, MappSc
			Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
	Water management	EIS Chapter Erosion and Sediment Control Plan Water Management Plan Surface Water Assessment Memo Groundwater Monitoring Standard Procedures	SWG – Joe Powers	Environmental Engineer, Bsc, Msc, 8 years
Chapter 7			SWG – Adam Pratt	Director, Principal Soil Socientist, Bsc, PhD, 20 years
Chapter 7, Appendix E, Appendix F, Appendix G, Appendix H, Appendix I, Appendix J, Appendix AB.			Pascal Hill	BSc (Hons) MAIG, Exploration Manger – Geologist, 15+ years' experience
			Earth Systems – Dr Jeff Taylor	AMD and Water Chemistry Specialist / Senior Principal Environmental Geochemist, CEnvP, BSc, PhD, 30 + years
		Surface water Memo	Earth Systems – Mr Nigel Murphy	Project Director / Senior Principal

Chapter no. or Appendix no.	Chapter name	Section	Staff member name and company	Qualifications and experience
		Preliminary Groundwater Resource Assessment		Environmental Scientist, BSc, MSc, 25 + years
Chapter 8 Appendix K	Air quality and greenhouse gas	EIS Chapter Air Quality Management Plan	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years BEng (Mining),
		Wanagement Han	Brad Valiukas ABM Resources	Chief Operating Officer, 16+ years
	Waste management	EIS Chapter	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Chapter 9			Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
			Brad Valiukas ABM Resources	BEng (Mining), Chief Operating Officer, 16+ years
	Tailings and waste management		Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
		EIS Chapter Tailings Storage Facility Geotechnical Conceptual Design report ABM Tailings Characterisation Memo ABM Waste Dump Characterisation Memo	4DG – Ian Lewis	Principal Engineering Geologist, MappSc, BSc, 30 + years
			4DG – Richard Rudd	Senior Engineering Geologist, BSc, 10 + years
Chapter 10 Appendix I,			4DG – Brian Francis	Senior Geotechnical Engineer, MCE, BCE, 10 years
Appendix L, Appendix M, Appendix N.			SWG – Joe Powers	Environmental Engineer, Bsc, Msc, 8 years
			SWG – Adam Pratt	Director, Principal Soil Socientist, Bsc, PhD, 20 years
		Geochemical Characterisation Memo	SWG – Hayley Castlehouse	Environmental Geochemist, BSc, (Soil Science) MSc, (Environmental Biogeochemistry) PhD. Sam Collins BSc, (Applied Geology).

Chapter no. or Appendix no.	Chapter name	Section	Staff member name and company	Qualifications and experience
			Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
			Brad Valiukas ABM Resources	BEng (Mining), Chief Operating Officer, 16+ years
Chapter 11		All Mine Closure Plan	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
Appendix O, Appendix P, Appendix X.	Mine closure and rehabilitation	Care and Maintenance Plan Ground Disturbance Management Plan	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
		EIS Chapter	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Chapter 12 Appendix S	Road transport and traffic management	Vehicle Management Plan	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
			Brad Valiukas ABM Resources	BEng (Mining), Chief Operating Officer, 16+ years
Chapter 13 Appendix T, Appendix U, Appendix V, Appendix W.	Social, economic, cultural and heritage risks	EIS Chapter Social Impact Management Plan Cultural and Heritage Management Plan Archaeological Heritage Clearance Report – Tim Hill	Darren Holden ABM Resources	BSc Hons, MAusIMM, Managing Director, 15+ years
Chapter 14	Environmental	All	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
	management plan		Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Chapter 15	Environmental offsets	EIS Chapter	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years

Chapter no. or Appendix no.	Chapter name	Section	Staff member name and company	Qualifications and experience
			EcOz - Tom Reilly	Project Manager/Senior Environmental Consultant, BSc (Hons) MEIANZ
			EcOz - Dane Trembath	Senior Zoological Consultant, BSc, MappSc
		EIS Chapter Fire Management Plan	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Chapter 16 Appendix Z, Appendix Y, Appendix AA, Appendix X.	Additional environmental impacts	Noise and Vibration Management Plan Biting Insect Management Plan, Ground Disturbance Management Plan	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
Chapter 17	Glossary	EIS Chapter	Collated by ABM Resources	N/A
Chapter 18	References	EIS Chapter	Collated by ABM Resources	N/A
Appendix A	ABM Final EIS guidelines	EIS Appendix	NT EPA	Not applicable
			Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
			Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
Appendix B	Legislation Matrix for Twin Bonanza Project	EIS Appendix	Jutta Zimmerman ABM Resources	Dip AQF, Dip Information Technology, Chief Financial Officer, Company Secretary, 20+ years
			Ashley Watson Piper Alderman	Partner Resources and Projects, LLB, 20 + years
Appendix C	Early dry season Flora and Fauna Report 2013	EIS Appendix	Tom Reilly EcOz	BSc (Hons) MEIANZ
Appendix D	Biodiversity Management Plan	EIS Appendix	Tom Reilly EcOz	BSc (Hons) MEIANZ

Chapter no. or Appendix no.	Chapter name	Section	Staff member name and company	Qualifications and experience
Appendix E	Erosion and Sediment Control Plan	EIS Appendix	SWG – Joe Powers	Environmental Engineer, Bsc, Msc, 8 years
			SWG – Adam Pratt	Director, Principal Soil Socientist, Bsc, PhD, 20 years
	Water	EIS Appendix	SWG – Joe Powers	Environmental Engineer, Bsc, Msc, 8 years
Appendix F	Management Plan		SWG – Adam Pratt	Director, Principal Soil Socientist, Bsc, PhD, 20 years
Appendix G	Surface Water	EIS Appendix	SWG – Joe Powers	Environmental Engineer, Bsc, Msc, 8 years
	Assessment Memo		SWG – Adam Pratt	Director, Principal Soil Socientist, Bsc, PhD, 20 years
Appendix H	Groundwater Monitoring Standard Procedures	EIS Appendix	SWG – Joe Powers	Environmental Engineer, Bsc, Msc, 8 years
			SWG – Adam Pratt	Director, Principal Soil Socientist, Bsc, PhD, 20 years
	Tailings Storage Facility Geotechnical Conceptual Design Report	EIS Appendix	4DG – Ian Lewis	Principal Engineering Geologist, MappSc, BSc, 30 + years
Appendix I			4DG – Richard Rudd	Senior Engineering Geologist, BSc, 10 + years
			4DG – Brian Francis	Senior Geotechnical Engineer, MCE, BCE, 10 years
Appendix J	Preliminary Groundwater Resource Assessment	EIS Appendix	Earth Systems – Dr Jeff Taylor	AMD and Water Chemistry Specialist / Senior Principal Environmental Geochemist, CEnvP, BSc, PhD, 30 + years
			Earth Systems – Mr Nigel Murphy	Project Director / Senior Principal Environmental Scientist, BSc, MSc, 25 + years
Appendix K	Air Quality Management Plan	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix L	ABM Tailings Characterisation	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist,

Chapter no. or Appendix no.	Chapter name	Section	Staff member name and company	Qualifications and experience
	Memo			MSc Earth Sciences, 3.5 years
Appendix M	ABM Waste Dump Characterisation Memo	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
			SWG – Joe Powers	Environmental Engineer, Bsc, Msc, 8 years
Appendix N	Geochemical Characterisation Memo	EIS Appendix	SWG – Hayley Castlehouse	Environmental Geochemist, BSc, (Soil Science) MSc, (Environmental Biogeochemistry) PhD. Sam Collins BSc, (Applied Geology).
			SWG – Adam Pratt	Director, Principal Soil Socientist, Bsc, PhD, 20 years
Appendix O	Mine Closure Plan	EIS Appendix	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
			Brad Valiukas ABM Resources	BEng (Mining), Chief Operating Officer, 16+ years
Appendix P	Care and Maintenance Plan	EIS Appendix	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
			Brad Valiukas ABM Resources	BEng (Mining), Chief Operating Officer, 16+ years
Appendix Q	Hazardous Materials Management Plan	EIS Appendix	Gary Scells	HSEC
Appendix R	Emergency Response Plan	EIS Appendix	Pascal Hill	BSc (Hons) MAIG, Exploration Manger – Geologist, 15+ years' experience
Appendix S	Vehicle Management Plan	EIS Appendix	Tim Hutchins	HSEC
Appendix T	Social Impact Management Plan	EIS Appendix	Darren Holden ABM Resources	BSc Hons, MAusIMM, Managing Director, 15+ years
Appendix U	Cultural and Heritage Management Plan	EIS Appendix	Darren Holden ABM Resources	BSc Hons, MAusIMM, Managing Director, 15+ years

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Appendix V	Archaeological Heritage Clearance Report	EIS Appendix	Tim Hill of Tim Hill Heritage Management and Planning	BA Hons
Appendix W	AAPA Search	EIS Appendix	Aboriginal Areas Protection Authority	Not Applicable
Appendix X	Ground Disturbance Management Plan	EIS Appendix	Justin Robins ABM Resources	BSc Geology, PDip Environmental Management, 16+ years
Appendix Y	Noise Management Plan	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix Z	Fire Management Plan	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix AA	Biting Insect Management Plan	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix AB	Topsoil Characterisation and Erosion Analysis	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix AC	Commitments Summary	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix AD	EIS Cross-reference table	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix AE	EIS Consultation Summary	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years
Appendix AF	EIS Contribution Summary	EIS Appendix	Rebecca Richards ABM Resources	Geochemist/ Project Geologist, MSc Earth Sciences, 3.5 years