



## appendix 4

### Environmental Risk Assessment

Number	Activity	Aspect	Impact	Hazard Category	Status and Proposed Controls	MRC	Probability	Risk Score	Further action/assessment	Assigned To	Date Due
1	<b>Operation of Existing Surface Facilities</b>	Water Management (non-compliance)	Non-compliance, fines, negative community issues	<b>Environmental</b>	Currently manage both surface water runoff and some underground water in accordance with site WMP. Discharge is sampled in accordance with existing EPL.	3	C-Moderate	13	Further assessment as part of EA.	Mark Robinson	
		Dust Generation	Non-compliance, fines, negative community issues	<b>Environmental</b>	Current management measures include manually operated water sprays. No formal Dust Management Plan.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Noise Generation	Non-compliance, fines, negative community issues	<b>Environmental</b>	No formal Noise Management Plan. Have undertaken random testing (complaints-based). Bi-annual noise monitoring programme. Issues typically related to breaker, belts and product bin.	3	C-Moderate	13	To be considered in EA.	Umwelt	
		Visual Amenity	Negative community perception	<b>Community</b>	Tree screen established to improve visibility from the Broadway. Relatively remote site. Only minor changes proposed for existing site.	5	D-Unlikely	24	To be considered in EA.	Umwelt	
		Energy Use, e.g. power, diesel etc	Community perception	<b>Community</b>	Multiple energy related public reports and plans each year including: ESAP; SD reporting; NGERS; NPI.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Water Demand (Potable water use)	Community perception	<b>Community</b>	Potable water use has been identified as an area for improvement. Potable Water Reduction Project has been developed.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Mine Closure	Community perception, relinquishment	<b>Strategic</b>	Mine Closure Plan prepared, which includes costings. Approved by DPI. No major issues identified as part of closure planning.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Hydrocarbons/Dangerous Goods/Explosives	Environmental impacts/safety	<b>Environmental</b>	Existing approved Site Security Plan August 2008, which covers explosives. Dangerous Goods notifications in place. Have management plan for the storage of dangerous goods, including fuel (WWC Hazardous Substances Management Standard (S2.5.03), Phase 1 Contamination Assessment has been completed (May 2005). Storage is within approved, bunded compounds as per relevant standards and guidelines.	3	D-Unlikely	17	To be considered in EA.	Umwelt	
		Traffic	Noise impacts	<b>Community</b>	Transport of product coal not part of the proposal. Traffic to be considered is limited to existing workforce, deliveries, bulk goods etc. No change to existing traffic is expected.	5	E-Rare	25	To be considered in EA.	Umwelt	
2	<b>Underground Mining</b>	UG Water Management	Environmental impacts - contamination, excessive use	<b>Environmental</b>	Potential risk of contamination of surface water from solids, solenitic is low risk, due to low volumes and dilution.	4	E-Rare	23	To be considered in EA.	Umwelt	
		Energy Use (Diesel/Electricity)	Community perception	<b>Community</b>	Multiple energy related public reports and plans each year including: ESAP; SD reporting; NGERS; NPI.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Gas drainage and venting of mine air	Community perception	<b>Community</b>	Gas drainage (passive) at Westside Open Cut. Mine Ventilation No. 2 and 3 Return Shafts.	5	D-Unlikely	24	To be considered in EA.	Umwelt	
3	<b>Subsidence</b>	Aboriginal Archaeology	Site impacts from subsidence	<b>Community</b>	Known and potential archaeological sites have potential to be impacted within subsidence area.	2	B-Likely	5	To be considered in EA. Consultation with Aboriginal community. Interim S90 for Longwall 38 to be approved by February 2009.	Umwelt	
		European Heritage	Site impacts from subsidence	<b>Community</b>	Potential for mining related heritage in subsidence area (old workings), however no current studies.	4	D-Unlikely	21	To be considered in EA.	Umwelt	

Number	Activity	Aspect	Impact	Hazard Category	Status and Proposed Controls	MRC	Probability	Risk Score	Further action/assessment	Assigned To	Date Due
		Flora and Fauna	Threatened Species impacts from subsidence	Environmental	Potential impact from ponding due to subsidence leading to loss or alteration of habitat.	3	C-Moderate	13	To be considered in EA.	Umwelt	
		Surface Water	ESC/stability impacts from subsidence	Environmental	Potential inter-connective cracking may impact surface water. Potential for increased erosion and sedimentation. Previous impacts on Diega Creek / Southern Coalfields Inquiry.	2	C-Moderate	8	To be considered in EA.	Umwelt	
		Groundwater	Environmental impacts	Environmental	Potential for inter-connective cracking may impact groundwater.	2	C-Moderate	8	To be considered in EA.	Umwelt	
		Gas/Fuel Pipeline / Fibre-Optic Cables	Env/Community impacts/publicity	Operations	Existing management plans developed with relevant stakeholders.	2	D-Unlikely	12	To be considered in EA.	Umwelt	
		Freeway	Env/Community impacts/publicity	Operations	Existing management plans developed with relevant stakeholder (RTA) for Longwall 38.	2	D-Unlikely	12	To be considered in EA.	Umwelt	
		Council Roads (Wakefield Rd)	Env/Community impacts/publicity	Operations	Will be subsidence under Wakefield Road. No current management plan.	3	D-Unlikely	17		Umwelt	
		Transmission Towers (Transgrid)	Env/Community impacts/publicity	Operations	Located outside of subsidence areas.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Communications Towers (Telstra)	Env/Community impacts/publicity	Operations	Potential for small degree of subsidence	3	C-Moderate	13	To be considered in EA.	Umwelt	
		Communications Towers (Gencom)	Env/Community impacts/publicity	Operations	Located within subsidence areas, small potential for impact.	4	C-Moderate	18	To be considered in EA.	Umwelt	
		Great North Walk	Env/Community impacts/publicity	Community	Within subsidence areas. Will be subject to cracking. Great North Walk Management Plan with Department of Lands.	3	D-Unlikely	17	To be considered in EA.	Umwelt	
		State Conservation Area	Env/Community impacts/publicity	Community	Within subsidence areas. Will be subject to cracking. Underground mining approved under SCA.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Private Landholders	Community perception	Community	Management plan with McCarthy property in place for Longwall 38. Potential subsidence impacts.	4	D-Unlikely	21	To be considered in EA.	Umwelt	

Number	Activity	Aspect	Impact	Hazard Category	Status and Proposed Controls	MRC	Probability	Risk Score	Further action/assessment	Assigned To	Date Due
4	<b>Construction of Additional Infrastructure (vent bores etc)</b>	Aboriginal Archaeology	Potential impacts from construction, non-compliance, fines	<b>Community</b>	Potential for surface disturbance from additional infrastructure and access. Will be managed by Due Diligence process.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		European Heritage	Potential impacts from construction, non-compliance, fines	<b>Community</b>	Potential for surface disturbance from additional infrastructure and access. Will be managed by Due Diligence process.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Flora and Fauna	Potential impacts from construction, non-compliance, fines	<b>Environmental</b>	Potential for impacts on threatened species from additional infrastructure and access. Will be managed by Due Diligence process.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Surface Water	Potential impacts from construction, non-compliance, fines	<b>Environmental</b>	Potential for erosion and sediment control issues from construction activities.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Dust Generation	Non-compliance, fines, negative community issues	<b>Environmental</b>	Potential pollution from drilling activities.	5	D-Unlikely	24	To be considered in EA.	Umwelt	
		Noise Generation	Non-compliance, fines, negative community issues	<b>Environmental</b>	Potential pollution from drilling activities.	5	D-Unlikely	24	To be considered in EA.	Umwelt	
		Visual Amenity	Negative community perception	<b>Community</b>	Potential for minor visual amenity impacts from drilling activities.	5	D-Unlikely	24	To be considered in EA.	Umwelt	
6	<b>Subsidence Remediation</b>	Aboriginal Archaeology	Potential impacts from subsidence remediation, non-compliance, fines	<b>Community</b>	Approval required for required subsidence remediation works required from DECC, including Due Diligence Surveys.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Flora and Fauna	Potential impacts from subsidence remediation, non-compliance, fines	<b>Environmental</b>	Approval required for required subsidence remediation works required from DECC, including Due Diligence Surveys.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
		Surface Water	Potential impacts from subsidence remediation, non-compliance, fines	<b>Environmental</b>	DWE approval required for works in close proximity to watercourses.	4	D-Unlikely	21	To be considered in EA.	Umwelt	
7	<b>Other</b>	End user / greenhouse gas issues	Negative community perception	<b>Community</b>	Consultation Strategy developed for project. No significant change in operational activities.	3	C-Moderate	13	To be considered in EA. Consultation Strategy in place.	Umwelt	