

Appendix D5

Environmental Impacts and Mitigation Matrix

THE NUNAVUT IMPACT REVIEW BOARD
PROJECT SPECIFIC INFORMATION REQUIREMENT - PART 2 FORM
TABLE 1 - IDENTIFICATION OF ENVIRONMENTAL IMPACTS

		ENVIRONMENTAL COMPONENTS	PHYSICAL	designated environmental areas (i.e. Parks, Wildlife Protected areas)	ground stability	permafrost	hydrology/ limnology	water quality	climate conditions (greenhouse gases)	eskers and other unique or fragile landscapes	surface and bedrock geology	sediment and soil quality	tidal processes and bathymetry	air quality (gaseous emissionsS & dust)	noise levels	other VEC:	other VEC:	other VEC:	BIOLOGICAL	vegetation	wildlife, including habitat and migration patterns	birds, including habitat and migration patterns	aquatic species, incl. habitat and migration/spawning	wildlife protected areas	other VEC:	SOCIO-ECONOMIC	archaeological and cultural historic sites	employment	community wellness	community infrastructure	human health (including social health)	traditional land use		
	PROJECT COMPONENTS/ACTIVITIES																																	
CONSTRUCTION	Laydown – Rankin Inlet					M									M					N									P	U	P	M		
	Rankin tank farm					M									M					M									P	U	P	M		
	Spur and mine site roads					M	M	M	N	M	M	M		M	M					N	M	M	M						P	P	P	M	P	
	Pads						M	M	M	N		M		M	M					N									P				N	
	Mill/camp complex					M		M	N					M	M					N		P							P					
	Underground development				M	N	M	M	N		M			M	M														P			M	N	
	Pit development				M	N	M	M	N	N	N	N		M	M					N	N	N	N					M	P				N	
	Tailings impoundment area				M	M	N	M	N					M	M					N	N	N	N					P					N	
	Overburden management				M	M	M	M				M		N	M					N	N	N	N					P					N	
OPERATION	Open pit mining				M	N		M	N		N	M		M	N														P			M	N	
	Underground mining				M	N		U	N		N			M															P			M		
	Mill operation							M							N														P			M		
	Ore stockpile management				M	M	M	M	N			M		N						N	M	M	M						P				M	
	Waste rock management				M	M	M	M				M		N						N	M	M	M						P				N	
	Tailings area management				M		N	M																					P			M	N	
	Camp operation							M				M																	P			M		
	Road operation							M	N			M		M	N					M	M	M							P	P		P	P	
	Waste incineration								N					M																P				
	Power generation								N					M																				
	Equipment emissions								N					M																	U		U	
DECOMMISSIONING	Pits closure					P		M				M		N						P	P	P	P						P		N	M	P	
	Underground mine closure					P														P	P	P							P		N	M	P	
	Mill and plant dismantling													M						P									P			M		
	Stockpile reclamation					P	P					M		M	N					P									P				P	
	Tailings impoundment area reclamation					P	P	M				M		M	N					P	M	M	P						P			M	P	
	Waste rock management area reclamation				P	P		P												P	P								P				P	
	Overburden management area reclamation					P	P		P					P						P	P								P				P	

Notes: Please indicate in the matrix cells whether the interaction causes an impact and whether the impact is:

P - Positive; N - Negative and non-mitigable; M - Negative and mitigable; U - unknown: If no impact is expected then please leave the cell blank