LOCAL ENVIRONMENT / COAL MINE DEVELOPMENT	MACRO & MICRO CLIMATE					GEOLOGY				COAL SEAMS												PERMAFROST								SURFICIAL ENVIRONMENT						LOCAL HUMAN ENVIRONMENT					
	Temperature	Wind	Precipitation	Humidity	Pressure	Surficial	Sub-Surface	Structure	Fractures	Overburden	Structure	Dust at varying Temp./ Humidities	Spontaneous Ignition at varying Temp.	Oxidation	Gas Content	Temperature	Moisture Content	Sulfur Content	Structure	Heat Content	Rock Burst	Ash Content	Classification	Temperature	Depth	Ice Content	Constituents	Water Content	Strength w/ Temp.	Level of Zero Amplitude	Fracturing	Surface Waters	Vegetation	Animal Life	Geomorphological Processes	Water Quality	Air Quality	Legal Land-Use	Actual Land-Use	Economic Activity Pattern	Settlement Pattern	Existing Infra - Structure	Local Population
OBJECTIVES Financial Return Market Characte Market Locatio Basic Location Production Leve Product Qua'ity Economic Polit cal Soc al								X		X	X							X	X	X		X	X														X					X
RE SOURCE CHARACTE Owne sh W nation Pro A																																					X					X
[illegible] A C [illegible]	X	X	X			X																		X	X	X	X	X			X	X	X	X			X	X	X	X	X	X
[illegible] [illegible] Pro [illegible] [illegible]	X	X	X	X		X	X	X	X	X	X	X			X						X			X	X	X	X	X	X	X	X			X	X	X				X	X		
[illegible] [illegible] Ro Ac [illegible] Pro	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X		X
[illegible] A [illegible] [illegible] [illegible] Pro																																X	X		X	X				X	X	X	
SAF [illegible] Codes ne ter Codes Wo Atmosphere Per s Ventilation Volume Ventilation Velocity Dust Supp Permissable Explosives	X	X	X	X							X		X	X	X						X		X				X																	
ROOF SUPPOR E ation Req ired Wid ne Inclined Ways Wo king Faces Ventilation Ways Slope Contact Stability							X	X	X	X	X	X				X	X							X	X	X	X	X	X		X	X												
VE TILA ION De A Temperature Se Rock Temperature Heating Requirement Cooling Requirement Humidity Dust Control Co Coal Oxidation	X			X			X	X		X		X		X	X	X								X	X	X	X	X		X		X				X								
[illegible] SUPPRESSION [illegible] Codes Equipments [illegible] Standards Surface Storage Surface Transportation [illegible] [illegible] Personnel Requirements Surface Mine & [illegible] [illegible] [illegible] Water Mining Dust Control Water Supply	X	X	X	X	X						X	X												X		X		X		X				X	X									
Mi [illegible] [illegible] Desired [illegible] [illegible] Desired [illegible] re Desired Humidity Surface Drainage Underground Drainage Worker Comfort Equipment		X	X			X	X	X	X	X						X								X	X	X	X	X		X	X	X				X			X	X			
BENEFICIATION Hand Picking Water Washing Air Washing Size Requirement Crushing Permissable Rock Content By-Products Coal Storage Water Content Dust Generation/Control	X	X	X	X						X	X					X	X	X	X	X		X	X							X	X	X		X	X	X	X	X	X		X		
SUPPORT SERVICES Maintenance Inventory Levels Worker Needs Community Needs Transportation	X	X	X		X																									X	X	X		X	X		X	X	X	X	X

X SIGNIFICANT IMPACT OF ENVIRONMENT ON COAL MINE DEVELOPMENT BY MAJOR CATEGORY

FIGURE 6. IMPACT OF LOCAL ENVIRONMENT ON ARCTIC ALASKAN COAL MINE DEVELOPMENT