APPENDIX 1.III

Commitments

Section	Commitment Description	Commitment Type	Project Phase
1 – Introduction			
1.1.4.1 – Environmental Policy	Fortune Minerals Limited (Fortune) is committed to conducting its business activities in an environmentally sound manner and takes responsibility to minimize effects on the environment at all stages of development. The organization, as a whole, seeks continuous improvement in environmental performance by establishing comprehensive environmental management programs to ensure that environmental effects are being adequately addressed; controls are in place to ensure compliance with policies and procedures; environmental activities are supported by adequate resources; and plans are in place to protect the environment for future generations. In the management of its business interests, Fortune will:		
	comply with all environmental laws and regulations and in absence of regulation, apply relevant best management practices;		
	establish and maintain clearly defined environmental management programs to guide its operations from exploration to final reclamation;		
	ensure that its directors, officers, and employees understand and adhere to its environmental management programs;		
	• provide its managers and supervisors at each operations with the authority and resources necessary to carry out the applicable environmental management programs;]	Construction
	develop an adaptive management system that will periodically review environmental management programs as scientific knowledge and stakeholder expectations evolve;	Management	Operation Closure
	 openly communicate and work with governmental, indigenous people, employees, business partners, suppliers and local communities to develop mutual understanding of environmental issues and awareness that may affect the Company; 		Closure
	minimize and mitigate its environmental impacts and support environmental enhancement programs of common benefit;]	
	 continuously review environmental achievements and technology to seek and implement methods for further improvement;]	
	 conduct regular environmental response plan reviews to verify compliance with the corporate policy and applicable regulations. Identify revisions or improvements to current practices to minimize environmental impacts; and 		
	allocate sufficient resources to meet the corporation's environmental goals.		
1.1.4.2 – Health and Safety Policy	The management of Fortune is committed to preserving the health and safety of employees, client's employees, and any other personnel that interact with operations, whether they be at the mine site, in plants, or in offices. Fortune will foster a culture conducive to reporting of unsafe acts or conditions in order that we may identify and negate those conditions before injuries occur. Fortune develops and maintains site-specific, comprehensive safety programs for each of each projects and offices. Fortune emphasizes proper implementation of programs and expects participation by all employees. Fortune promotes proactive safety programs and initiatives. Fortune will:		
	 comply with or exceed all health and safety laws and regulations, requirements and industry standards applicable to activities;]	
	 identify and mitigate health and safety hazards arising from activities; 		
	 ensure that staff understands that working safely is a condition of employment and that all workers are responsible for their own health and safety, as well as the health and safety of those around them; 	Management	Construction Operation
	ensure the competency of staff is maintained and provide staff with training, knowledge, e and resources to achieve health and safety excellence;		
	 commit to the continual improvement of safety programs by setting health and safety objectives and targets, and measure and monitor performance through regular inspections, audits, and investigation of all incidents; 		
	integrate health and safety into business planning and decision making;	1	
	commit to protect the health and safety of staff and the public; and		
	commit to always doing what is right when it comes to health and safety of staff and the public; if it cannot be done safely it should not be done at all.		
1.1.4.3 – Sustainable Development	Fortune recognizes that the protection of the environment is key to the success of the Company's corporate social responsibilities objectives. It is Fortune's goal to demonstrate that high standards of environmental stewardship and a commitment to sustainable development can be applied to all business activities undertaken by Fortune. Fortune is committed to making a positive difference in the communities in which we live and work. Fortune recognizes that creating opportunities to generate greater value for our shareholders must, at the same time, foster sustainable development in the communities where we operate. Fortune strives to carry out its activities in a manner that reflects the values of the Company, its directors, officers, employees, local communities and societies in which it operates. In the management of its business interests, the Company will:		
	 maintain, communicate, and monitor its Code of Business Conduct guidelines established to set ethical standards for business practices in compliance with applicable laws, rules, and regulations and to promote responsible behaviour by the Company, its directors, officers, and employees; 	Management	Construction Operation
	 observe the fundamental tenets of human rights, safety and non-discrimination in the workplace for all Company employees and commit to developing their full potential and encourage employment and business opportunities for indigenous peoples and local community members; 		Closure
	 consider and evaluate social, cultural, environmental, governmental and economic factors in its exploration, development and mining activities with priority given to open dialogue and interaction with indigenous peoples and local community members to facilitate long-term and beneficial resource development; and 		
	 provide stakeholders with accurate, appropriate and timely information on Company activities. 		





Section	Commitment Description
1.1.4.4 – Community Engagement Policy	Through community investment, Fortune aspires to have a positive and meaningful impact by supporting: education, community, and environment.
2 – Project Alternatives	
	No commitments present
3 – Project Description	
	No commitments present
4 – Engagement	
4.2 - Engagement Approach 4.2.1 - Engagement Planning and Objectives	Fortune's approach to engagement for the NICO Project was, and continues to be, based on informing potentially affected communities and land users about the NICO F community members in a dialogue about the NICO Project itself and their concerns, and informing them of the potential effects and opportunities. This engagement has the programs of exploration and the design of the proposed mine to incorporate improvements. Fortune maintains an expressed openness to any community or meeting Government's consent. Fortune values the input of the elders and land users and Fortune is committed to develop the NICO Project in the most environmentally logical maccount the traditional and future uses of the land by the people on the land.
4.2 - Engagement Approach 4.2.2 - Engagement Approaches for Traditional Knowledge Holders	Fortune recognizes the importance of active and continued contact with First Nations and Métis communities. Fortune has set a tradition of engagement since exploration the late 1990s. Fortune remains committed to information sharing and dialogue with the First Nation and Métis communities beyond the Developer's Assessment Approximation engagement program as the project moves through the approvals, permitting, development, operation, and closure phases. Fortune has offered to fund a Traditional Knot Tłįcho to provide the information that Fortune requires for the Environmental Assessment (EA) process. Fortune has negotiated an agreement with the North Slave Métis conduct its own Métis TK research to provide the information Fortune requires for its EA.
4.3 - Engagement Activities	Fortune proposed plans for community engagement include:
Proposed Community Engagement	 direct community consultation meetings to further discuss the NICO Project using the 3-dimensional physical models developed to help demonstrate the NICO Project once consent from the Tłįchǫ Government is provided. In the future, Fortune anticipates a need to undertake at least annual consultation meetings in the communities Tłįchǫ Government, community leadership or elders.
	 plans to form a Tłįchǫ advisory board, or being subject to a board formed by the Tłįchǫ Government that will become the primary conduit for consultation between Fort however, this has not been negotiated, and the Tłįchǫ Government may have other ideas that it would rather implement.
	 plans that the environmental monitoring of the NICO Project will be either undertaken by a Tłįchǫ owned company or government agency, funded by Fortune and man Land and Water Board (WLWB).
5 – Traditional Knowledge	
5.4 - Integration of Traditional	In addition to the monitoring and mitigation plans detailed in the following Sections for the NICO Project, Fortune has committed to including the following:
Knowledge 5.4.3 - Monitoring and Mitigation	 Fortune is committed to having discussions with hunters and trappers who approach Fortune with the belief that their hunting and trapping practices have been compr Project;
Miligation	Fortune will hire Tłįchǫ people to perform on-site monitoring whenever possible, and assist in the design of monitoring programs;
	Fortune has completed initial site visits for the Elders of all communities to assist in the design of site monitoring plans;
	burial sites will be avoided, and archaeological sites will be avoided or mitigated according to acceptable procedures;
	Fortune will examine ways to mitigate dust generation on the road to limit potential impacts on plant and animal life;
	Fortune will have a monitoring program in place to monitor water quality;
	• Fortune has added a baseline water quality station at Behchoko that will be monitored now and during the operation of the NICO Project to check water quality;
	Fortune has added 2 water quality stations in Hislop Lake and will add another in Behchoko to satisfy concerns over water quality in that lake; and
	 Fortune has committed to developing a monitoring program with the help of the Tłįchǫ that will examine the health of streams and lakes potentially affected by the NIC



	Commitment Type	Project Phase
	Management	Construction Operation Closure
Project, engaging s allowed Fortune to adjust ng at any time with the Tłįcho manner possible taking into	Management	Construction Operation Closure
ory work began at NICO in oach (DAR) community nowledge (TK) study by the tis Association (NSMA) to	Management	Construction Operation Closure
ect and its natural setting es and at the request of the	Management	Construction
ortune and the Tłįchǫ people;	Monitoring	Operation Closure
andated by the Wek'èezhìi		
promised by the NICO		
	Management	Construction
	Environmental	Construction Operation
	Design Feature Monitoring	Closure
ICO Project.		



Section	Commitment Description	Commitment Type	Project Phase
7 – Key Line of Inquiry: Wa	er Quality		-
7.5 Pathway Analysis Table 7.5-1	Environmental design features and mitigation incorporated by Fortune into the design of the NICO Project to mitigate a potential impact or limit the effects to surface water quality are listed in Table 7.5-1. These include:		
7.5 Pathway Analysis	Sediment releases from road construction including watercourse crossings can affect surface water quality of nearby surface waters. The following mitigation steps will be undertaken:		
7.5.2 – Results	• sediment and erosion control measures (e.g., silt curtains, runoff management) will be used to control sediment releases during construction; and		
7.5.2.1 – Pathway with No Linkage	 in-stream work during road crossing construction will either be avoided or be limited to when watercourses within or adjacent to the construction area are not flowing or during low flows conditions. 		Construction
	Sediment releases from land disturbance during mine construction can affect surface water quality of nearby surface waters. The following mitigation steps will be undertaken:	Management	
	• sediment and erosion control measures (e.g., silt curtains, runoff management) will be used to control sediment releases during construction, and during reclamation; and	Environmental Design Feature	Construction Closure
	construction runoff will be captured and discharged into a polishing pond (e.g., Surge Pond), to settle out suspended sediments prior to release to peanut lake.		
	Sediment releases during the construction of the water intake in Lou Lake and the effluent outfall in Peanut Lake can affect surface water quality in Lou Lake and Peanut Lake.		Construction
	 construction work will be under dry conditions (i.e., a cofferdam will be constructed to isolate the construction area in the lake) and sediment and erosion control measures (e.g., silt curtains, runoff management) will be used to control sediment releases during construction. 		Construction
7.5 Pathway Analysis 7.5.2 – Results	Spills and leaks from equipment operation (e.g., petroleum products, reagents, wash-down) on the mine site or along the NICO Project Access Road (NPAR) can affect groundwater, surface water, and sediment quality of nearby surface waters. The following mitigation steps will be undertaken:		
7.5.2.1 – Pathway with No	hazardous materials and fuel will be stored according to regulatory requirements to protect the environment and workers (i.e., Materials and Waste Management Plan);		Construction Operation
Linkage	• smaller storage tanks (e.g., engine oil, hydraulic oil, and waste oil, and coolant) will be double walled, or located in lined and bermed containment areas;		
	 separate areas will be established for the handling and temporary storage of hazardous wastes; 	Management	
	 reagents and fuel Enviro-Tanks will be located in larger, double-walled containers; 	Management Environmental Design Feature Monitoring	
	domestic and recyclable waste dangerous goods will be stored on-site in appropriate containers to prevent exposure until they are shipped off-site to an approved facility;		
	 individuals working on-site and handling hazardous materials will be trained in the Transportation of Dangerous Goods; 		
	soils from petroleum spill areas will be deposited and spread in a lined landfarm cell for bioremediation;		
	an Emergency Response and Spill Contingency Plan has been developed and will be implemented;		
	emergency spill kits will be available wherever toxic materials or fuel are stored and transferred; and		
	construction and mining equipment, machinery, and vehicles will be regularly maintained.		
7.5 Pathway Analysis 7.5.2 – Results 7.5.2.2 – Secondary Pathways	If water quality does not meet site-specific water quality objectives, water will be impounded in the Surge Pond or in Seepage Collection Ponds (SCPs) No. 1, 2, and 3 until the Effluent Treatment Facility (ETF) is commissioned where it will be treated prior to release to Peanut Lake.	Environmental Design Feature	Operation
7.5 Pathway Analysis 7.5.2 – Results	Process and potable water requirements for the NICO Project may decrease drainage flows and surface water levels, and affect surface water quality. To mitigate these possibilities the following will be done:		
7.5.2.2 – Secondary	capture and reuse site water to reduce fresh water requirements;	Environmental Design Feature	Operation
Pathways	 recycle water from tailings thickener and from the Open Pit for grinding operations; and 	Design realure	
	 recycle excess water from the SCPs and treat prior to entering the receiving environment. 		
7.5 Pathway Analysis	The following mitigation steps will be undertaken for site water management:		
7.5.2 – Results	the Water Management Plan will control surface water on-site;		
7.5.2.2 – Secondary Pathways	• runoff from the mine site will be captured and will either be treated in the ETF and discharged to Peanut Lake or will be re-used in the Mineral Processing Plant (Plant);		
	any water that cannot be released will be impounded in the Water Management Ponds (e.g., Surge Pond, SCPs);	Environmental	Onenation
	 the site will have sufficient storage capacity in Surge Ponds to store both operating flows and storm event; 	Design Feature	Operation
	 water from the Open Pit will be pumped to the Surge Pond and then either to the Plant for re-use or to the ETF for treatment prior to discharge to Peanut Lake; and 	1	
	 sewage and grey water will be treated with a Rotary Biologic Contactor and the effluent will be pumped to Reclaim Pond in the Co-Disposal Facility (CDF), only if unsuitable for discharge. Water from the Reclaim Pond will be treated in the ETF prior to discharge. 	1	





Section	Commitment Description
7.5 Pathway Analysis	The CDF will prevent vertical and lateral seepage by:
7.5.2 – Results	capturing runoff from the CDF in SCPs and diverting it to the Plant for recycling or to the ETF;
7.5.2.2 – Secondary Pathways	sequestering any potential acid-generating Mine Rock within the interior of the CDF;
T allways	• covering any areas in the core of the pile with overburden where potential acid-generating Mine Rock is to be sequestered to reduce any infiltration; and
	directing runoff flow at closure and post-closure to the Open Pit.
7.5 Pathway Analysis	To mitigate the possibility that water quality in the Flooded Open Pit and outflow affecting surface water quality in downstream surface waters, Fortune will:
7.5.2 – Results 7.5.2.2 – Secondary Pathways	• treat water from the Flooded Open Pit using a Wetland Treatment System (if required) prior to discharge into Peanut Lake.
7.5 Pathway Analysis	Fortune will employ the following air emissions and dust deposition mitigation measures at the NICO Project to limit the effects to surface water:
7.5.2 – Results 7.5.2.3 – Primary Pathways	water roads to suppress dust production;
7.5.2.5 – Filinary Falliways	use of upswept exhausts on construction equipment;
	enforce speed limits to assist in reducing dust;
	ensure equipment and fleet are equipped with industry-standard emission control systems;
	enclose conveyance systems and processing facilities;
	ensure processing equipment have high efficiency bag houses to reduce emissions of particulate matter;
	develop operating procedures that reduce dust generation and air emissions (e.g. regular maintenance of equipment to meet emission standards);
	limit the road footprint disturbance area while maintaining safe construction and operation practices.
7.5 Pathway Analysis	The discharge of effluent from the ETF can affect surface water quality in Peanut Lake and in downstream surface waters. The following mitigation steps will be undertake
7.5.2 – Results 7.5.2.3 – Primary Pathways	treated water from the ETF will be pumped through a diffuser directly to Peanut Lake; or
T.S.Z.S – Thindry Fathways	• if additional settling, polishing, or further treatment is required, then the treated water from the ETF will be discharged to the Contingency Pond.
7.5 Pathway Analysis	Long-term seepage from the CDF can affect surface water quality in downstream surface waters. The following mitigation steps will be undertaken:
7.5.2 – Results 7.5.2.3 – Primary Pathways	the CDF will be capped during closure to isolate Mine Rock and tailings and minimize leaching.
7.5.2.5 – T finaly T aliways	any seepage from the CDF will be intercepted in passive Wetland Treatment Systems prior to discharge to Nico Lake.
7.14 Monitoring and Follow- up	Upon approval of the NICO Project, an Aquatic Effects Monitoring Program (AEMP) will be implemented to limit effects to water quality and other aquatic components and predictions. The final AEMP will include provisions for environmental effects monitoring as required under the Metal Mining Effluent Regulations of the Fisheries Act. The Indian and Northern Affairs Canada (INAC) Guidelines on designing and implementing aquatic effects monitoring programs in the Northwest Territories and the draft Adap (Monitoring Response) guidelines from the WLWB as appropriate. Specific objectives of the AEMP include the following:
	provide information to test predicted impacts from the NICO Project DAR and reduce uncertainty;
	incorporate local traditional and ecological knowledge, where applicable and available;
	• propose action levels or adaptive management triggers that can be used as early warning signs for reviewing and implementing mitigation practices and policies;
	design studies and data collection protocols that are consistent with other programs in the region; and,
	consider existing regional and collaborative programs, such as Cumulative Impact Monitoring Program.



	Commitment Type	Project Phase
	Environmental Design Feature	Operation
		Closure Post-closure
	Environmental Design Feature	Post-closure
	Environmental Design Feature	Construction Operation Closure
aken:	Environmental Design Feature	Operation
	Environmental Design Feature	Closure Post-closure
and to test impact The AEMP will consider the daptive Management	Management Monitoring	Operation Closure Post-closure



Section	Commitment Description	Commitment Type	Project Phase
8 – Key Line of Inquiry: Cari	bou and Caribou Habitat		
8.4 Pathway Analysis 8.4.2 Results	Environmental design features and mitigation incorporated by Fortune into the design of the NICO Project to mitigate a potential impact or limit the effects to caribou are listed in Table 8.4-1. These include:		
Table 8.4-1	• to mitigate direct loss and fragmentation of caribou habitat the current layout of the mine footprint will limit the area that is disturbed and the NPAR will be as narrow as possible; and	Management Environmental	Construction
	 to reduce potential of the NICO Project footprint to cause changes to soils, vegetation and caribou habitat, culverts and other design features to reduce changes to local flows and drainage patterns and drainage area have been added. 	Design Feature	
8.4 - Pathway Analysis	The CDF will prevent vertical and lateral seepage by:		
8.4.2 - Results 8.4.2.1 - Pathways with No	capturing runoff from the CDF in SCPs and diverting it to the Plant for recycling or to the ETF;		Construction
Linkage	sequestering any potential acid-generating Mine Rock within the interior of the CDF;	Environmental Design Feature	Operation
Changes to Habitat Quality,	covering any areas in the core of the pile with overburden where potential acid-generating Mine Rock is to be sequestered to reduce any infiltration; and	Design reature	
Movement, and Behaviour	directing runoff flow at closure and post-closure to the Open Pit.		Closure
	Surface water runoff from the core mine facilities area can affect surface water, soil, vegetation and caribou habitat. Fortune will mitigate these potential events by:		
	the Water Management Plan will contain surface water on-site;	Management	
	runoff from the mine site will be captured and diverted to the ETF or the Plant;	Environmental	Construction Operation
	the site will have sufficient storage capacity in ponds to store both operating flows and storm events; and	Design Feature	Operation
	sewage will be treated in the Sewage Treatment Plant (STP) and the effluent will either be re-used during processing or discharged to Peanut Lake through the diffuser.	1	
8.4 - Pathway Analysis	Spills on the mine site or along the NPAR can affect surface water quality, soils, vegetation, caribou habitat, and caribou mortality. The following mitigation steps will be undertaken:		Construction
8.4.2 - Results	hazardous materials and fuel will be stored according to regulatory requirements to protect the environment and worker (i.e. Hazardous Substances Management Plan);	1	
8.4.2.1 - Pathways with No Linkage	smaller storage tanks will be double walled or located in lined and bermed containment areas;	Management Environmental	
Changes to Habitat Quality, Movement, and Behaviour	• reagents and fuel Enviro-Tanks will be located in larger, double-walled containers domestic and recyclable waste dangerous goods will be stored on-site in appropriate containers to prevent exposure until they are shipped off-site to an approved facility;		
Changes to Survival and Reproduction	 individuals working on-site and handling hazardous materials will be trained in the Transportation of Dangerous Goods; 	Design Feature	Operation
Reproduction	soils from petroleum spill areas will be deposited and spread in a lined landfarm cell for bioremediation;	Monitoring	
	an Emergency Response and Spill Contingency Plan has been developed;	1	
	emergency spill kits will be available where toxic materials or fuel are stored and transferred; and		
	construction and mining equipment, machinery and vehicles will be regularly maintained.		
	Air emissions and dust deposition can cause changes to chemical properties of surface water, soils, vegetation, wetlands, and caribou habitat therefore to mitigate this Fortune will:		
	water roads, airstrips and laydown areas to suppress dust production;	1	
	enforce speed limits to assist in reducing dust;	Management	
	ensure equipment and fleet are equipped with industry-standard emission control systems;	Environmental	Construction
	enclose conveyance systems and processing facilities;	Design Feature Monitoring	Operation
	 ensure processing equipment have high efficiency bag houses to reduce emissions of particulate matter; and 		
	 develop operating procedures that reduce dust generation and air emissions (e.g. regular maintenance of equipment to meet emission standards). 		
	To mitigate the possibility that water quality in the Flooded Open Pit and outflow affecting caribou health or long-term seepage from the CDF impacting groundwater and surface water quality, which can affect soils, vegetation and caribou habitat Fortune will:	Environmental	Construction
	 treat water from the Flooded Open Pit using a wetland treatment (if required) system prior to discharge into Peanut Lake; 	Design Feature	Operation
	 use wetland treatment systems prior to discharging water from the CDF into Peanut Lake; and 	1	
	cap the CDF during closure to isolate tailings and mine rock and prevent leaching.	Environmental Design Feature	Closure





Section	Commitment Description	Commitment Type	Project Phase
8.4 - Pathway Analysis 8.4.2 - Results 8.4.2.2 - Secondary	Process and potable water requirements for the NICO Project may decrease drainage flows and surface water levels, and affect vegetation, wetlands, and caribou habitat. To mitigate these possibilities the following will be done:	Environmental	Operation
	capture and reuse site water to reduce fresh water requirements;		
Pathways Changes to Habitat Quality,	recycle water from tailings thickener and from the open pit for grinding operations; and	Design Feature	
Movement, and Behaviour	recycle excess water from the SCPs and treat prior to entering the receiving environment.		
8.4 - Pathway Analysis	Physical hazards on the mine site and collisions with vehicles and aircraft will be mitigated using the following measures:		
8.4.2 - Results	temporarily suspending surface blasting when caribou is spotted within the danger zone identified by the blast supervisor;	Management Environmental	
8.4.2.2 - Secondary Pathways	speed limits will be established;		Construction Operation
Changes to Survival and	the presence of caribou will be monitored and communicated to site personnel;	Design Feature	Operation
Reproduction	all employees will be provided with environmental awareness training; and	Monitoring	
	removal of physical hazards will be part of the decommission plan.		Closure
	Attraction to the NICO Project may increase predator numbers and predation risk, which can affect caribou populations. To mitigate this Fortune will:		
	base most of the construction of the NPAR out of the NICO site to reduce the number of camps along the route;		
	skirt all buildings and stairs to the ground to limit opportunities for use as shelter;		Construction Operation Closure
	development and implement a Domestic and Industrial Waste Management Plan;		
	collect food wastes in suitable receptacles that limit attraction or impact to caribou;	Management Environmental Design Feature Monitoring	
	store recyclables and waste hazardous materials on-site in appropriate containers to prevent exposure until shipped off-site to an approved facility;		
	prohibit littering and feeding of wildlife;		
	 education and reinforcement proper waste management practices with all workers and visitors to the site; 		
	education on the risk associated with feeding wildlife and careless disposal of food garbage;		
	 conduct ongoing reviews of the efficiency of the waste management program and improvement through adaptive management; and 		
	develop and implement a Wildlife Effects Monitoring Program (WEMP) (see Section 8.10).	_	
8.4 - Pathway Analysis 8.4.2 - Results 8.4.2.3 - Primary Pathways	Sensory disturbances can change the amount of different quality habitats and alter caribou movement and behaviour (distribution), or change energetic costs to caribou and wildlife from disturbance or displacement. Fortune's NICO Project design will:		
	use conventional insulation, baffles and noise suppressors on equipment;	Management	
	temporarily suspended surface blasting if caribou are observed within the danger zone identified by the blast supervisor;	Environmental Design Feature Monitoring	Construction
	house stationary equipment inside buildings;		Operation
	ensure regular maintenance of equipment to limit emissions; and	Morntornig	
	provide all employees with environmental awareness training.	_	
	To mitigate the effect that improved access for harvesting can have on caribou population size Fortune will:		
	develop and enforce "no hunting, trapping, harvesting, or fishing policy"; and	Management	Construction
	prohibit the use of recreational all-terrain vehicles at site.		Operation
8.10 - Monitoring and Follow-	Fortune's NICO Project WEMP specific objectives include the following:		
up	 provide a process for regulators and communities to participate in the development of caribou effects mitigation and monitoring; 		
• • •	 consider and incorporate, where possible, traditional knowledge; 	Management	Construction
	 provide mine managers with clear reasons for making decisions regarding NICO Project environmental management; 	Environmental	Operation
	 provide the proposed environmental design features, and mitigation policies and practices; 	Design Feature Monitoring	Closure
	 assess the effectiveness of mitigation; and 	Monitoring	
	 verify the accuracy of impact predictions made in the DAR, reduce uncertainty of impact predictions, and identify unanticipated effects. 		





Section	Commitment Description	Commitment Type	Project Phase
9 – Key Line of Inquiry: Closu	ire and Reclamation		
9.4 - Conceptual Closure and Reclamation Plan	Fortune's Closure and Reclamation (C&R) goal is to achieve maintenance free, self sustaining ecosystems with land uses similar to pre-development conditions. The NICO Project goals and principles include the following:		
9.4.1.1 - Progressive Closure and Reclamation and Goals	progressive reclamation will be undertaken whenever practical;		
and Reciamation and Goals	landforms will be geotechnically stable;	Management	
	 drainage systems will be designed to minimize erosion rates and substance loadings; 	Environmental Design Feature	Closure
	 reclaimed areas will eventually develop into self-sustaining ecosystems with an acceptable degree of biodiversity; 	Design reduite	
	 on-site public health and safety will be protected; and 		
	 natural colonization and recruitment of native vegetation will be encouraged in ecologically receptive areas. 		
9.4 - Conceptual Closure and	Fortune's corporate policies relevant to the ongoing closure process include the following:		
Reclamation Plan 9.4.1.1 - Progressive Closure	 final land use objectives will be developed in consultation with stakeholders; 	Managamant	Closuro
and Reclamation and Goals	 there will be an ongoing consultation process with regulators and local stakeholders; and 	Management	Closure
	 adaptive management of the C&R Plan will be pursued through the incorporation of results from Fortune's site specific studies and any available regional research. 		
9.4 - Conceptual Closure and	Fortune's basic end land use goals for the NICO Project include the following:		
Reclamation Plan 9.4.1.1 - Progressive Closure	 reclaim the landscape to optimize the value of watershed, wildlife habitat, fish habitat, or other resources and taking into account stakeholder preference; 	Management	
and Reclamation and Goals	 protect the aesthetic qualities of the landscape; and 	Environmental Design Feature	
	 provide for traditional land uses (e.g. hunting and trapping) as preferred by key stakeholders. 		
	Areas where Fortune's progressive reclamation and closure is planned for the NICO Project include the following:		Closure
	 the cover on the sideslopes of the CDF (i.e., the CDF Perimeter Dyke) will be placed and re-vegetated progressively throughout the operational life of the NICO Project; 	Management	
	 once underground mining is completed, the mobile equipment will be removed, decommissioned and shipped off-site; 	Environmental	
	the underground mine workings will be backfilled in strategic locations; and	Design Feature	
	• Wetland Treatment Systems No.1, 2, and 3 will be constructed and tested during the operational life of the NICO Project to confirm they are fully operational when closure occurs.		
9.4 - Conceptual Closure and Reclamation Plan 9.4.4 - Summary of the	Short-term C&R objectives for Fortune's NICO Project include the following:		
	 progressively reclaim disturbed areas during operations as soon as they are no longer required; 		
Closure and Reclamation	 establish physical and chemical stability at the site, consistent with conditions existing prior to the start of operations; 		
Plan	 minimize the risk of erosion and sediment loss as a result of on-site runoff; 		Closure
9.4.4.2 - Design Objectives	 stabilize slopes on all structures to maintain sage working conditions and facilitate reclamation activities; 	Management Environmental	
	cover ground to prevent soil drifting and dust production; and	Design Feature	
	maintain an environmentally safe site.	Ŭ	
	Long-term C&R objectives for Fortune's NICO Project include the following:		
	• return the site to a state similar to other habitats in the same region that are not affected by the NICO Project which should facilitate similar wildlife use to baseline conditions; and		
	create, to the extent practicable, an aesthetically pleasing final landscape.		
9.4 - Conceptual Closure and	Fortune's general mitigation measures to reduce the potential for permafrost degradation and subsequent subsidence of areas around the NICO Project mine site include the following:		
Reclamation Plan 9.4.4 - Summary of the	 during winter months, clear areas for construction using a snow packed surface; 		
Closure and Reclamation	re-vegetate disturbed areas as soon as possible;		
Plan • 9.4.4.3 - Role of Climate • Change in Development of • Closure and Reclamation •	 manage drainage around infrastructure to reduce pooling of water at the surface; 	Environmental Design Feature	Operation Closure
	 insulate thaw-sensitive slopes; 		Closure
	limit the mine footprint disturbance area;		
	 limit the road footprint disturbance area, while maintaining safe construction and operation practices; 		





9.4.4.3 - Role of Climate Change in Development of Closure and Reclamation Plan	use coarser materials for road construction to minimize frost effects;
Closure and Reclamation	
	 building foundations will be built on bedrock not susceptible to frost heave to minimize thawing of permafrost in sensitive areas; and
(continued)	 stripping of organic horizons containing ice-rich permafrost will be limited to areas where it is absolutely necessary to reduce the potential for an increase in thaw depth subsidence.
9.4 - Conceptual Closure and	Environmental design features and mitigation that will be implemented by Fortune at the NICO Project to limit wildlife injury and mortality include the following:
Reclamation Plan 9.4.4 - Summary of the	 blasting will be temporarily suspended when wildlife (ungulates and carnivores) are spotted within the "safe zone";
Closure and Reclamation	 the CDF will be regularly monitored for wildlife activity and wildlife hazards;
Plan	 reflectors or other deterrents will be installed to discourage wildlife from crossing the roads;
9.4.4.4 - Wildlife Considerations	 ditches will be contoured at closure as appropriate to remove any hazards to wildlife;
	 wildlife deterrent actions will be implemented by knowledgeable and trained personnel; and
	 at closure, borrow pits, the Plant area, stockpile areas, etc. will be re-contoured to reduce hazards to wildlife.
	Specific erosion control practices available for the general NICO Project area include the following:
Reclamation Plan 9.4.4 - Summary of the	 minimize soil exposure and control surface runoff, especially during wet weather and in areas close to watercourses;
Closure and Reclamation	construct temporary cross ditches to redirect surface runoff;
Plan	 construct temporary berms of imported logs, construction timers, sandbags, or other material as appropriate and available;
9.4.4.5 - Key Closure and Reclamation Activities	• construct roads so natural drainage patterns are not impeded and in a manner that runoff to road ditches enters natural drainage systems or contoured containment are
9.4.4.5.6 - Erosion Control	• use temporary erosion control measures such as mulches, mats, and netting, to control erosion prior to establishment of a protective vegetation cover;
	 apply tackifiers, where necessary, to stabilize soils and use hydroseeders for seeding on steep slopes; and
	 promptly seed exposed areas and topsoil stockpiles with a self-sustaining, erosion controlling seed mix appropriate to the region.
9.6 - Monitoring and Follow-	Specific objectives of the WEMP include the following:
Up 9.6.2 - Potential Monitoring	 provide a means for regulators and communities to participate in the development of wildlife effects mitigation and monitoring;
Activities	consider and incorporate, where possible, traditional knowledge;
9.6.2.4 - Terrestrial	 provide mine managers with clear reasons for making decisions regarding NICO Project environmental management;
Monitoring Wildlife Appendix 18.II	 outline the proposed environmental design features, and mitigation policies and practices;
	assess the effectiveness of mitigation; and
	 verify the accuracy of impact predictions made in the DAR, reduce uncertainty of impact predictions, identify unanticipated effects.
10 – Subject of Note: Air Qual	ity
10.3 - Pathway Analysis	Fortune is committed to the following general management approaches for air emissions from the NICO Project:
10.3.2 - Results 10.3.2.1 - Good Practices to	 mine equipment and haul vehicles will be regularly maintained to reduce emissions and maximize fuel efficiency;
Mitigate and Reduce	 low sulphur (15 parts per million by weight) diesel will be used in fleet vehicles;
Emissions	 site road surfaces will be regularly maintained for operational efficiencies and to minimize fuel consumption; and
	• NICO Project waste will be screened. Material containing metal and chlorinated organic waste will be segregated and shipped off-site. The remainder will be combuste incinerator. The waster incinerator will be engineered and operated to meet the Canadian Council of Ministers of the Environment emission standards for dioxins and fu
	Fortune will minimize nitrogen oxide emissions through the following measures:
	• using corporate fleet vehicles that meet applicable emission standards at the time of purchase and encouraging contractors to do the same with their vehicles;
	 considering nitrogen oxide emissions as a criterion in future engine and boiler upgrades;
	 consider energy conservation initiatives such as maintaining site road surfaces to improve the energy efficiency of the fleet; and
	consider the use of catalytic converters to reduce nitrogen oxide emissions from the mobile fleet.



	Commitment Type	Project Phase
oth and related thaw		
	Environmental Design Feature Monitoring	Construction Operation
		Closure
areas;	Environmental Design Feature	Construction Operation
	Management Environmental Design Feature	Construction Operation
sted in an approved furans.	Management Environmental Design Feature Monitoring	Construction Operation



Section	Commitment Description
10.3.2.1 - Good Practices to Mitigate and Reduce Emissions	Fortune will manage transport-related dust and particulate emissions by adopting the following management practices:
	applying a water spray to control dust emissions on haul road during the summer;
(continued)	consider the use of covered conveyors and limiting the height from which material is dropped; and
· · ·	manage vehicle speed to limit wind-blown dust from vehicle wheel entrainment.
10.9 - Follow-up and	The following monitoring programs and mitigation and adaptive management strategies will employed by Fortune at the NICO Project:
Monitoring 10.9.1 - Monitoring Program	regulatory review that identifies legislation, regulatory, and policy requirements considered in the program;
and Mitigation and Adaptive	scope that provides a description of the scope of the program;
Strategies	goals that outline all of the goals of the program;
	air quality monitoring program (Section 10.9.1.1);
	emissions monitoring program (Section 10.9.1.2);
	mitigative and adaptive strategies (Section 10.9.1.3);
	response planning describing strategies for responding to events of significant emission rates or air quality impacts; and
	annual report describing procedures for the preparation of annual reports and their ancillary components (e.g. references, glossary, concordance tables).
11 – Subject of Note: Water	Quality
11.5 - Monitoring and Follow-up	Fortune will conduct hydrological monitoring at the NICO Project as part of AEMP.
12 – Subject of Note: Fish ar	nd Aquatic Habitat
12.3 - Pathway Analysis 12.3.2 - Results	Environmental design features and mitigation will be incorporated by Fortune into the design of the NICO Project to mitigate a potential impact or limit changes to fish and construction includes:
12.3.2.1 .1- Pathways with No Linkage	• best management practices and erosion control practices will limit wind and water erosion on topsoil and overburden stockpiles (e.g. vegetation, erosion mats);
Mine Construction	construction runoff will be captured and discharged into a polishing pond to settle out suspended sediments prior to release to Peanut Lake;
Mine Infrastructure and	• construction work will be under dry conditions and sediment and erosion control measures (e.g. silt curtains, runoff management) will be used to control sediment relea
Access Road Footprint Mine General Operation	a single clear-span bridge will be installed at the Marian River crossing to mitigate impact to fish habitat;
Table 12.3-1 Potential	• appropriately sized fish screens which meet DFO guidelines will be fitted to Lou Lake intake line to limit fish access and to protect fish from entrainment and impingement
Pathways for Effects to the	hazardous materials and fuel will be stored according to regulatory requirements to protect the environment;
Persistence of Fish and Condition of Aquatic Habitat	smaller storage tanks will be double walled and located in lined and bermed containment areas;
	separate areas will be established for the handling and temporary storage of hazardous wastes;
	reagents and fuel Enviro-Tanks will be located in larger double-walled containers;
	domestic and recyclable waster dangerous goods will be stored on-site in appropriate containers to prevent exposure until they are shipped off-site to a approved facility
	individuals working on-site and handling hazardous materials will be trained in the Transportation of Dangerous Goods;
	soils from petroleum spill areas will be deposited and spread in a lined landfarm cell for bioremediation;
	an Emergency Response and Spill Contingency Plan has been developed and will be implemented;
	emergency spill kits will be available wherever toxic materials or fuel are stored and transferred; and
	 operations and mining equipment, machinery and vehicles will be regularly maintained.
L	



Commitment Type	Project Phase
Monitoring	Operation
Monitoring	Construction Operation Closure Post-closure
Management Environmental Design Feature Monitoring	Construction Operation
	Type Type



Section	Commitment Description
12.3 - Pathway Analysis	changes to local surface waters and drainage patterns will be minimized through use of constructed ponds;
12.3.2 - Results 12.3.2.1.2- Secondary	access roads will be as narrow as possible, while maintaining sage construction and operation practices;
Pathways	use of culverts and standard environmental design features that reduce impacts to local flows and drainage patterns and drainage areas;
Mine Infrastructure and	instream work during road crossing construction along the NPAR will be avoided, or limited to the minimum extent possible;
Access Road Footprint Mine General Operation	rip-rap and aggregate placed on top of the intake structure will create higher quality habitat than what is affected;
Closure - Decommissioning	if required, fish habitat compensation will be developed in consultation with DFO and other regulatory agencies;
Phase Clearing Long torm and	the CDF will minimize seepage, capture runoff from the facility in SCPs and divert it to the Plant for recycling or the ETF;
Closure - Long-term and Reclamation	any potential acid-generating Mine Rock will be sequestered within the interior of the CDF;
Table 12.3-1 Potential	• overburden directed to the CDF will be used to cover any areas in the core of the pile where potential metal-leaching Mine Rock is to be sequestered to reduce any infil
Pathways for Effects to the Persistence of Fish and	capture and reuse site water to reduce fresh water requirements;
Condition of Aquatic Habitat	water from tailings thickener and from the tailings basin will be recycled for grinding operations;
·	excess water from the collection pond (tailings basin) will be recycled in mill operations;
	• sediment and erosion control measures (e.g. silt curtains, runoff management) will be used to control sediment releases during land reclamation;
	• if water quality in the discharge from the Open Pit does not meet water quality standards at the time of discharge, then discharge water will be treated using an active (wetland treatment system) prior to discharge into Peanut Lake;
	develop and implement a C&R Plan;
	at closure any seepage from the CDF will be intercepted and treated in a passive wetland treatment facility prior to discharge to Nico Lake;
	co-disposal area will be capped during closure to isolate Mine Rock and tailings and minimize leaching;
12.3 - Pathway Analysis	mine footprint will limit the area that is disturbed;
12.3.2 - Results 12.3.2.2 - Primary Pathways	watering of roads, airport strip, and laydown areas will suppress dust production;
Mine Infrastructure and	enforcing speed limits will assist in reducing dust;
Access Road Footprint	• conveyance systems and processing facilities will be enclosed and processing equipment will be fitted with high efficiency bags to reduce emissions of particulate matter
Mine General Operation	• operating procedures will be developed that reduce dust generation and air emissions (e.g. regular maintenance of equipment to meet emission standards);
	construction equipment and trucks will be equipped with industry-standard emission control systems;
	• sewage will be treated in the STP and the effluent will either be re-used during processing or discharged to Peanut Lake through the diffuser;
	the Water Management Plan will manage surface water on-site;
	mine wastewater will be treated and tested before release to surface waters;
	operating procedures will be developed that reduce dust generation and air emissions;
	site staff will not be permitted to fish; and
	the use of recreational all terrain vehicles will be prohibited at site;
12.10 - Monitoring and Follow-up	Upon approval of the NICO Project, an AEMP will be implemented to limit effects to water quality and other aquatic components and to test impact predictions. The final A provisions for environmental effects monitoring as required under the Metal Mining Effluent Regulations of the Fisheries Act. The AEMP will consider the INAC Guidelines implementing aquatic effects monitoring programs in the Northwest Territories and the draft Adaptive Management (Monitoring Response) guidelines from the WLWB as a objectives of the AEMP include the following:
	 provide information to test predicted impacts from the NICO Project DAR and reduce uncertainty;
	incorporate local traditional and ecological knowledge, where applicable and available;
	• propose action levels or adaptive management triggers that can be used as early warning signs for reviewing and implementing mitigation practices and policies;
	design studies and data collection protocols that are consistent with other programs in the region; and,
	consider existing regional and collaborative programs, such as Cumulative Impact Monitoring Program.



	Commitment Type	Project Phase
nfiltration;	Management Environmental Design Feature Monitoring	Construction Operation
		Closure
atter;	Management Environmental Design Feature Monitoring	Construction Operation
I AEMP will include es on designing and s appropriate. Specific	Management Monitoring	Construction Operation



Section	Commitment Description	Commitment Type	Project Phase
13 – Subject of Note: Terrain	and Soils		
13.3 - Pathway Analysis 13.3.2 - Results	Environmental design features and mitigation incorporated by Fortune into the design of the NICO Project to mitigate a potential impact or limit changes to terrain and soils are listed in Table 13.3- 1. These include:		
13.3 - Pathway Analysis	The CDF will prevent vertical and lateral seepage by:		
13.3.2 - Results 13.3.2.1 - Pathways with No	 capturing runoff from the CDF in SCPs and diverting it to the Plant for recycling or to the ETF; 		
Linkage	 sequestering any potential acid-generating Mine Rock within the interior of the CDF; and 		Construction Operation
Mine Infrastructure Footprint	 covering any areas in the core of the pile with overburden where potential acid-generating Mine Rock is to be sequestered to reduce any infiltration. 		
and NICO Project Access Road Footprint	Environmental design features and mitigation incorporated by Fortune into the design of the NICO Project to mitigate potential impact or limit changes to terrain and soils from surface water run-off from the core facilities include:	Environmental Design Feature	
	the Water Management Plan will contain surface water on-site;		
	 runoff from the mine site will be captured and diverted to the ETF or the Plant; 		
	 the site will have sufficient storage capacity in constructed ponds to store both operating flows and storm events; 		
	 sewage will be treated in the STP and the effluent will either be re-used during processing or discharged to Peanut Lake through the diffuser; and 		
	directing runoff flow at closure and post-closure to the Open Pit.	Environmental Design Feature	Closure
13.3 - Pathway Analysis	The following mitigation steps will be undertaken to prevent/limit the effect of spills on soil at the NICO Project site and along the NPAR:		
13.3.2 - Results 13.3.2.1 - Pathways with No	 hazardous materials and fuel will be stored according to regulatory requirements to protect the environment and worker (i.e., Hazardous Substances Management Plan); 		Construction Operation
Linkage	 smaller storage tanks will be double walled or located in lined and bermed containment areas; 		
Mine Infrastructure Footprint and NICO Project Access	 reagents and fuel Enviro-Tanks will be located in larger, double-walled containers domestic and recyclable waste dangerous goods will be stored on-site in appropriate containers to prevent exposure until they are shipped off-site to an approved facility; 	1	
Road Footprint	 separate areas will be established for the handling and temporary storage of hazardous waste; 	Management Environmental	
	domestic and recyclable waste dangerous goods will be stored on-site in appropriate containers to prevent exposure until they are shipped off-site to an approved facility;	Design Feature	
	 individuals working on-site and handling hazardous materials will be trained in the Transportation of Dangerous Goods; 	Monitoring	
	 soils from petroleum spill areas will be deposited and spread in a lined landfarm cell for bioremediation; 		
	an Emergency Response and Spill Contingency Plan has been developed;		
	 emergency spill kits will be available where toxic materials or fuel are stored and transferred; and 		
	 construction and mining equipment, machinery and vehicles will be regularly maintained. 		
	To mitigate the possibility that water quality in the Flooded Open Pit and outflow may affect soil or long-term seepage from the CDF could affect soil Fortune will:		
	 monitor outflow from the Flooded Open Pit and treat if necessary; 	Environmental Design Feature Monitoring	Operation
	 establish constructed wetlands to treat seepage water from the CDF; and 		Closure
	cap the CDF during closure to isolate tailings and mine rock and prevent leaching.		
	In addition Fortune will employ the following additional mitigation and environmental design features to reduce the potential for permafrost melting/loss effects to terrain and soil:	Environmental	Construction
	all mine infrastructure will be built on bedrock, where possible.	Design Feature Monitoring	Operation





Section	Commitment Description
13.3 - Pathway Analysis 13.3.2 - Results	Fortune will employ the following additional mitigation practices and permafrost design features at the NICO Project to reduce the potential for permafrost melting and subseffects to terrain and soil:
13.3.2.2 - Secondary Pathway	clear areas for construction from a snow packed surface during winter months;
Permafrost Melting and	completed as much construction as possible during winter months with sufficient snow cover to minimize vehicle damage;
Subsequent Subsidence	re-vegetate disturbed areas as soon as possible;
Effects	use culverts to maintain surface drainage and reduce pooling of water at the surface;
	limit the mine footprint disturbance area;
	limit the road footprint disturbance area while maintaining safe construction and operation practices;
	insulate infrastructure, where possible;
	build the foundations of buildings on bedrock not susceptible to frost heave to minimize thawing of permafrost in sensitive areas; and
	• when possible, organic and/or topsoil horizons will not be stripped in areas containing ice-rich permafrost to reduce potential for an increase in thaw depth and related t
Flows and Drainage	Fortune will employ the following additional environmental design features at the NICO Project site to reduce the potential for loss or alteration of local flows, drainage patt to effect terrain and soil:
	use culverts and other design features to reduce changes to local flows and drainage patterns and drainage areas.
Air Emissions and Dust	Fortune will employ the following air emissions and dust deposition mitigation measures at the NICO Project site to limit the effects to soil:
Deposition	water roads, airstrips, and laydown areas to suppress dust production;
	enforce speed limits to assist in reducing dust;
	ensure equipment and fleet are equipped with industry-standard emission control systems;
	enclose conveyance systems and processing facilities;
	ensure processing equipment have high efficiency bag houses to reduce emissions of particulate matter; and
	develop operating procedures that reduce dust generation and air emissions (e.g. regular maintenance of equipment to meet emission standards).
13.4 - Effects to Terrain and	Environmental design features and mitigation incorporated by Fortune into the design of the NICO Project to mitigate changes to terrain and soils include:
Soils 13.4.1 - Effects to Terrain	the layout of the mine footprint will limit the area that is disturbed;
Units, Soil Quality and	the NPAR will be as narrow as possible, while maintaining safe construction and operation practices;
Distribution	erosion control practices will limit wind and water erosion on soil and overburden stockpiles (e.g. vegetation, erosion mats);
Physical loss or alteration of	admixing of topsoil with subsoil during salvage and reclamation will be limited;
local soils from the NICO Project footprint	 topsoil horizons may be stripped from the mine area and then stored in stockpiles along the perimeter of the site for eventual replacement upon decommissioning and or Project;
	Plant site infrastructure (buildings) foundations will be built on bedrock not susceptible to frost heave and to minimize thawing of permafrost;
	• organic and/or topsoil horizons will not be stripped in areas containing ice-rich permafrost to reduce potential for an increase in thaw depth and related thaw subsidence
	the underground mine will be backfilled in strategic locations.
Residual ground disturbance	Environmental design features and mitigation incorporated by Fortune into the design of the NICO Project to mitigate changes to terrain and soils include:
from permanent NICO	limit size of NICO Project footprint;
Project components.	soil salvage and reclamation;
	continue to refine a C&R Plan;
	CDF will be capped during closure to isolate tailings and prevent leaching; and
	constructed wetlands will be established to treat seepage water at closure.



	Commitment Type	Project Phase
d thaw subsidence.	Environmental Design Feature Monitoring	Construction Operation
atterns, or drainage areas	Environmental Design Feature	Construction Operation
	Environmental Design Feature Monitoring	Construction Operation
	Environmental Design Feature	Construction Operation
d closure of the NICO	Environmental Design Feature Monitoring	Construction Operation
	Environmental Design Feature	Closure
	Management Environmental Design Feature Monitoring	Closure



Section	Commitment Description
14 – Subject of Note: Vegetat	tion
14.3 - Pathway Analysis 14.3.2 - Results	Environmental design features and mitigation incorporated by Fortune into the design of the NICO Project to mitigate a potential impact or limit the effects to vegetation and These include:
Mine Infrastructure Footprint and NICO Project Access	the layout of the mine footprint will limit the area that is disturbed;
Road Footprint	the NPAR will be as narrow as possible, while maintaining safe construction and operation practices;
•	use of culverts and other design features that reduce changes to local flows and drainage patterns and drainage areas;
	the NPAR design will use coarser materials to minimize frost effects;
	when possible, construction will be completed during winter months with sufficient snow cover to minimize vehicle damage;
	the Water Management Plan will manage surface water on-site.;
	the site will have sufficient storage capacity in constructed ponds to store both operating flows and storm events; and
	• sewage will be treated in the STP and the effluent will either be re-used during processing or discharged to Peanut Lake through the diffuser.
14.3 - Pathway Analysis	The CDF at the NICO Project site will prevent vertical and lateral seepage by:
14.3.2 - Results	capturing runoff from the CDF in SCPs and diverting it to the Plant for recycling or to the ETF;
14.3.2.1 - Pathways with No Linkage	sequestering any potential acid-generating Mine Rock within the interior of the CDF;
Co-Disposal Facility	covering any areas in the core of the pile with overburden where potential acid-generating Mine Rock is to be sequestered to reduce any infiltration;
	runoff from the mine site will be captured and diverted to the ETF or the Plant; and
	direct runoff flow at closure and post-closure to the Open Pit.
Spills and Hazardous	The following mitigation steps will be undertaken to prevent/limit the effect of spills on vegetation at the NICO Project site and along the NPAR:
Materials	hazardous materials and fuel will be stored according to regulatory requirements to protect the environment and worker (i.e. Hazardous Substances Management Plan
	smaller storage tanks will be double walled or located in lined and bermed containment areas;
	 reagents and fuel Enviro-Tanks will be located in larger, double-walled containers domestic and recyclable waste dangerous goods will be stored on-site in appropriate exposure until they are shipped off-site to an approved facility;
	individuals working on-site and handling hazardous materials will be trained in the Transportation of Dangerous Goods;
	soils from petroleum spill areas will be deposited and spread in a lined landfarm cell for bioremediation;
	an Emergency Response and Spill Contingency Plan has been developed;
	emergency spill kits will be available where toxic materials or fuel are stored and transferred; and
	construction and mining equipment, machinery and vehicles will be regularly maintained.
Outflow from Flooded Open	To mitigate the possibility that water quality in the Flooded Open Pit and outflow may affect vegetation health or long-term seepage from the CDF could affect vegetation F
Pit or Seepage	monitor outflow from the Flooded Open Pit and treated if necessary;
	establish constructed ponds to treat seepage water; and
	cap the CDF during closure to isolate tailings and mine rock and prevent leaching.
14.3 - Pathway Analysis 14.3.2 - Results	Fortune will employ the following additional mitigation and environmental design features at the NICO Project to reduce the potential for permafrost melting and subseque vegetation:
14.3.2.1 Secondary	clear areas for construction from a snow packed surface during winter months;
Pathways Permafrost Melting and	disturbed areas will be revegetated as soon as possible;
Subsequent Subsidence	use coarser materials for road construction to minimize frost effects;
Effects	
	insulate infrastructure where possible;
	 Insulate infrastructure where possible; Plant site infrastructure (buildings) foundations will be built on bedrock not susceptible to frost heave and to minimize thawing of permafrost; and



	Commitment Type	Project Phase
are listed in Table 14.3-1.	Environmental Design Features Monitoring	Construction Operation
an); te containers to prevent	Management Environmental Design Feature Monitoring	Construction Operation Closure
d thaw subsidence.	Management Environmental Design Feature Monitoring	Construction Operation



Section	Commitment Description	Commitment Type	Project Phase
Air Emissions and Dust Deposition	Fortune will employ the following air emissions and dust deposition mitigation measures at the NICO Project to limit the effects to vegetation:		
	water roads, airstrips and laydown areas to suppress dust production;		
	enforce speed limits to assist in reducing dust;		
	ensure equipment and fleet are equipped with industry-standard emission control systems;		
	enclose conveyance systems and processing facilities;		
	ensure processing equipment have high efficiency bag houses to reduce emissions of particulate matter; and		
	develop operating procedures that reduce dust generation and air emissions (e.g. regular maintenance of equipment to meet emission standards).		
Introduction of Non-Native		Management	
Species	regular cleaning of construction equipment/vehicles; and	Environmental	Construction
	develop and implement an invasive plant management strategy.	Design Feature Monitoring	Operation
14.3 - Pathway Analysis	To mitigate the possibility of process and potable water affecting vegetation on the NICO Project site the following will be done:	Ű	
14.3.2 - Results	capture and reuse site water to reduce fresh water requirements;	Environmental	Operation
Process and Potable Water Requirements	recycle water from tailings thickener and from the Open Pit for grinding operations; and	Design Feature	
Requirements	recycle excess water from the SCPs and treat prior to entering the receiving environment.		
14.3 - Pathway Analysis	The following mitigation steps will be undertaken to prevent/limit the residual ground disturbance effect on vegetation at the NICO Project site and along the Access Road:	Management Environmental Design Feature Monitoring	Construction Operation Monitoring
14.3.2 - Results	Imit the size of the NICO Project footprint;		
14.3.2.3 - Primary Pathways	salvage and store growth media for re-vegetation;		
	continue to refine the C&R Plan; and		
	develop a re-vegetation Plan.		
14.10 - Monitoring and Follow-up	Environmental monitoring will include the implementation of a Vegetation Management Plan designed to work in conjunction with other programs (e.g., soils, closure and reclamation, and Biophysical Management and Monitoring Plans). The monitoring activities would include the monitoring of re-vegetation following reclamation and weed surveys. More information on the Vegetation Management Plan designed to Management Plan designed to work in conjunction with other programs (e.g., soils, closure and reclamation, and Biophysical Management and Monitoring Plans). The monitoring activities would include the monitoring of re-vegetation following reclamation and weed surveys. More information on the Vegetation Management Plan can be found in Section 18.	Monitoring	Construction Operation Monitoring
15 - Subject of Note: Wildlife			
15.3 - Pathways Analysis 15.3.2 - Results 15.3.2.1 - Pathways with No Linkage Changes to Habitat Quality, Movement and Behaviour	For the NICO Project site and along the NPAR, all vegetation clearing would take place outside of the migratory bird season where possible. In the event that construction activities must be completed during the migratory bird breeding season, then the vegetation and Growth Media will be removed prior to the nesting season.	Environmental Design Feature	Construction
15.3 - Pathways Analysis	Mitigation that will be implement to decrease risk to animals from physical hazards at Fortune's NICO Project site include the following:		
15.3.2 - Results	temporarily suspending surface blasting if large mammals are observed within the danger zone identified by the blast supervisor;		Construction Operation
15.3.2.2 - Secondary Pathways	removal of physical hazards will be part of the decommission plan;	Management Environmental Design Feature Monitoring	
Changes to Survival and	speed limits will be established;		
Reproduction	the presence of wildlife will be monitored and communicated to site personnel;		
	the CDF will be regularly monitored for wildlife activity and wildlife hazards;		
	road berms will be covered with small-sized granular material to reduce injury hazards to wildlife crossing the roads;		
	at decommissioning the entire site area will be re-contoured to reduce hazards to wildlife;		
	wildlife deterrent actions will be implemented by knowledgeable and trained personnel; and		
F	all employees will be provided with environmental awareness training.		





Section	Commitment Description	Commitment Type	Project Phase
Section 15.10 - Monitoring and Follow-up	Upon approval of the NICO Project, Fortune will implement a WEMP (Appendix 18.II) to limit effects to wildlife and wildlife habitat, determine the effectiveness of mitigation, and test impact predictions. The principal goal of the WEMP is to provide information for the NICO Project Environmental Management System to adaptively manage the NICO Project to protect wildlife and wildlife habitat.	-	
	Specific objectives of the WEMP include the following:		
	 provide a means for regulators and communities to participate in the development of wildlife effects mitigation and monitoring; 	Management Environmental	Construction
	consider and incorporate TK where possible;	Design Feature	Operation
	provide mine managers with clear reasons for making decisions regarding NICO Project environmental management;	Monitoring	
	outline the proposed environmental design features, and mitigation policies and practices;		
	assess the effectiveness of mitigation; and	1	
	verify the accuracy of impact predictions made in the DAR, reduce uncertainty of impact predictions, identify unanticipated effects.	1	
16 - Subject of Note: Human	n Environment		
16.2 - Socio-Economic Impacts	As part of Fortune's commitment to provide employment and business opportunities to Northerners hiring preferences will be given to Wek'èezhìi Settlement Area residents, Aboriginal peoples, and other Northerners. Priority will be given to the residents of Tłįchǫ communities.		
16.2.4 - Effects to Employment and Business Opportunities 16.2.4.2 - Results 16.2.4.2.1 - Employment	A Tłįchǫ human resources professional will be hired to lead the recruitment process to facilitate the ability to recruit people from the area. All job postings will be given to the Tłįchǫ community employment coordinators to give them first opportunity to source an appropriate candidate from their communities.	Management	Construction Operation Closure
16.2 - Socio-Economic Impacts 16.2.4 - Effects to Employment and Business Opportunities 16.2.4.2 - Results 16.2.4.2.1 - Employment: Employability	The NICO Project will mainly require workers with prerequisite skills to do the job rather than using trainees. Nevertheless, Fortune is committed to finding ways to attract and retain local study area community members to work at the NICO Project, particular Tłįchǫ residents. As community interests and basic skills are well suited to the majority of skilled and semi-skilled positions required during mine construction, Fortune will focus its pre-employment training around developing skills in those areas.	Management Monitoring	Construction Operation Closure
16.2 - Socio-Economic Impacts	Fortune has developed several plans, strategies, and commitments for the NICO Project to maximizing direct employment, contracting, advancement, and retention of Wek'èezhìi Settlement Area residents and other Aboriginal and northern people. General mitigation measures are, as follows:		Construction Operation Closure
16.2.4 - Effects to Employment and Business	Fortune will be flexible with the entry requirements, where possible, and make every effort to support employees or community residents to upgrade their skills.	Management Monitoring	
Opportunities 16.2.4.2 - Results	 Rosters may vary, influenced by the nature of the work, the level of responsibility, and the place of residence of the employee. A flexible shift roster, as well as the relatively close proximity of the mine, may be attractive to Tłįchǫ residents and potential new entrants to the labour market. 	Worntornig	
16.2.4.2.3 - Mitigation Measures for Employment and Contracting	Employees will be provided with free scheduled round-trip, work-related transportation from the following local study area communities: Yellowknife, Behchokò, Wekweètì, Whatì, and Gamètì. The daily bus service (including weekends) will be scheduled for employees. Care and maintenance workers will be based out of Whatì and will be brought by bus to and from Whatì daily on 10-hour shifts. Workers from Wekweètì would be transported to and from site via small aircraft.		Operation
	• Equivalent skills and qualifications will be considered when recruiting and hiring. As long as safety can be maintained, and in accordance with specific position requirements, Fortune will try to hire workers at all levels of proficiency, including pre-literate workers. Fortune will attempt to overcome these challenges by incorporating essential skills into safety training, technical training, and production planning.		
	Fortune will provide and encourage opportunities for apprenticeships where there are sufficient available journeymen and eligible apprentices.	Management	
	Fortune will seek opportunities to encourage and support Aboriginal workers who would like to pursue supervisory or management roles.	Environmental Design Feature	
	Fortune will develop a strategy directed at women to create more opportunities or remove barriers to women working at the site.	Monitoring	
	Fortune will communicate clearly their Criminal Record Check policy so that no one is unjustly denied a job due to a criminal record.]	
	Fortune will encourage employees and contractors affected by substance abuse to seek assistance with the assurance of their support and confidentially through that process.	1	
	 Fortune will make information available to local study area schools and other community organizations so that female youth, in particular, become more knowledgeable about the various types of available jobs and the required education and training to fill these positions. 	-	
F.	Fortune will provide summer employment for students on the NICO Project, giving priority to those from the Tłįcho communities.		'





Section	Commitment Description	Commitment Type	Project Phase
16.2.4.2.3 - Mitigation	All contractors and employees will be expected to participate in a Cultural Awareness Training Workshop.		
Measures for Employment and Contracting (continued)	• An Employee and Family Assistance Program will be offered to support all employees when working at the mine site. Fortune will liaise with the communities to support the issues with shift rotations and the difficulties of home life. If an employee terminates their employment due to family or personal issues, then every reasonable opportunity will be given to re-hire the employee after a reasonable period. Consideration will be given to work with the provider to make available more Aboriginal speaking counselors for employees and their families.		
	Fortune will monitor the effectiveness of its local hiring and contract policies and programs.		
16.2 - Socio-Economic Impacts 16.2.4 - Effects to	In consultation with the Tłįchǫ people, Fortune will develop specific strategies for the employment of Aboriginal and other northern women at the NICO Project site. These strategies include an on- the-job training program during the construction phase, student achievement awards, work term placement opportunities, and summer employment with priority for students from the Tłįchǫ communities. Where possible, work rosters will be made flexible to provide opportunities to women who have not previously been able to seek employment outside of the community.		
Employment and Business Opportunities 16.2.4.2 - Results 16.2.4.2.4 - Employment	Security: It is imperative that all women feel safe and secure at the worksite. Trained security staff will be on-site overseeing any concerns. The enforcement of a zero tolerance policy for drugs and alcohol will contribute to a respectful and comfortable workplace. Arrangements will be in place for separate women's quarters to give women a more secure environment. Supervisory staff will be trained to be sensitive and communicative with women to maintain a respectful workplace. A buddy system will be in place for women who use the outdoor recreational trails.	Management	Construction
Polices for Aboriginal and Other Northern Women	• In addition, access on-site by non-employees will be restricted. Most transportation to the site will be by company-operated vehicles. No other mines or industry are currently on, or expected to be on, the NPAR. Site access will be controlled by security professionals.	Environmental Design Feature Monitoring	Operation Closure
	Safety: Work safety will be paramount on-site with qualified safety professionals providing direction and oversight. Safety will be the responsibility of all employees, contractors, and visitors. Training will be provided for all employees before commencing work to provide a safe work environment. Thus, training will be appropriate to each position.	Wontoning	
	Anti-harassment: Anti-harassment policy and procedures are currently in place. These will be communicated to all employees and contractors and strictly enforced. Communications links will be implemented for workers to report any incidents of harassment without reprisal. Fortune will implement a process for reporting any cases of harassment and how to manage and resolve the situation.		
16.2 - Socio-Economic Impacts	Fortune is committed to designing plans, strategies, and other commitments meant to increase the mine-ready workforce, support career paths in mining, and offer training programs. Fortune is currently making plans and preparations to begin pre-employment training. The following mitigation steps for training will be implemented:	Monitoring	Construction Operation
16.2.4 - Effects to Employment and Business Opportunities 16.2.4.2 - Results	• Fortune will partner with the Mine Training Society, which has likewise teamed up with Aurora College, to consider the Underground Miner Training Program. Recruitment of an Aboriginal workforce may be accomplished through a dedicated underground/open pit training program. Fortune also expects to develop an apprenticeship program where there are sufficient available journeyman and eligible apprentices.		
16.2.4.2 - Results	Fortune will support potential employees from the Tłįchǫ communities to attend Class 1 Driver Training in Fort Smith. Training will be focused on specific job skill development.		
Commitments	• Fortune will offer workplace orientation sessions in the community for new workforce entrants. Mine orientation will also include money management and adapting to mine lifestyle and work habits.		
	• Several people in the communities have had heavy equipment experience or training, although not necessarily with mining. If hired, they will be provided with site-specific on-the-job training. Community meetings will be held about training and job opportunities with the NICO Project. Community leaders will be consulted on recruitment and education support decisions. The company will increase community visits, on-site information presentations, and tours as the NICO Project is approved, as well as before and during construction.		operation
	 An Impact Benefit Agreement (IBA) that is satisfactory to all parties is being considered with the Tłįchǫ communities. This agreement may include measures to protect social and cultural values as well as addressing training, employment, and business opportunities. 		
	 A Tłįchǫ human resources professional will be hired to lead Fortune's recruitment program. Opportunities will be sought for new work entrants to be further developed for more advanced or diverse roles through on-the-job training and support for educational upgrading. 		
16.2 - Socio-Economic Impacts 16.2.4 - Effects to	Fortune's commitment to maximizing employment of Aboriginal and northern residents extends to its contractor employment in the local study area, and the regional study area. Fortune intends to establish, enhance, and increase its business activities with Aboriginal and northern residents, and particularly with Tłįchǫ contractors. Through its contracting process, Fortune will try to provide opportunities in employment and career development for Aboriginal and northern residents.	0	
Employment and Business	Fortune's strategies to maximize employment of Aboriginals and northern residents through its contractors include:		
Opportunities 16.2.4.2 - Results 16.2.4.2.6 - Employment: Drugs and Alcohol	 Preference will be given to Tłįchǫ businesses that have the capacity to perform the work, followed by Aboriginal, northern, and other companies, in this order of priority. Fortune's procurement practices will particularly benefit Tłįchǫ businesses, with human resource and labour force development activities directed to Tłįchǫ communities and people. This support will result in stronger communities and individuals with increased entrepreneurial, business, and technical skills. 		Construction Operation
	• Fortune will expect its contractor companies to have and implement Aboriginal hiring policies and procedures similar to its own. Every effort will be made with all contractors to maximize hiring from the Tłįchǫ communities, Aboriginal people, and across the regional study area. To the extent possible contractors will be expected to draw their labour from qualified local sources, support training and recruitment initiatives at the pre-employment phase, provide employee development, and focus on employee retention, particularly of Aboriginal people.		
	Orientation meetings will be held with contractors to make sure that they understand Fortune's policies, procedures, and commitments. All contractor personnel will complete the orientation process on-site. Penalties will be built into the contracts to improve compliance.		





Section	Commitment Description	Commitment Type	Project Phase
16.2 - Socio-Economic Impacts 16.2.6 - Effects to Public Infrastructure and Services 16.2.6.2 - Results 16.2.6.2.1 - Public Infrastructure and Services	During construction, equipment and supply will be hauled to the NICO Project site locally using a combination of the proposed NPAR, the existing Whati and Gamèti winter roads, the Proposed Tłįchǫ Road Route, and regionally using the NWT highway system. Fortune will be paying royalties and taxes to all levels of government that will be allocated as appropriate, including most likely for road infrastructure.	Management	Construction Operation
16.2 - Socio-Economic	Fortune has proposed the following environmental design features for the NICO Project that relate to demands on infrastructure, including any effect on social services from in-migration.		
Impacts 16.2.6 - Effects to Public	Fortune will offer pick-up points throughout the local study area communities.	Environmental	1
Infrastructure and Services 16.2.6.2 - Results	 The mine camp will include the necessary facilities to sustain the workforce at the site, including having medical personnel accessible on a continuous basis, reducing demand on transport of material and people. 	Design Features Monitoring	Construction Operation
16.2.6.2.2 - Labour Shortages for Local Services	 Fortune will offer a volunteer incentive that employees can apply for; it will be provided to those employees interested in volunteering their time for social or cultural programs or activities in their home communities. 	, , , , , , , , , , , , , , , , , , ,	
16.2 - Socio-Economic Impacts 16.2.7 - Effects to Health and Wellness	Fortune recognizes the challenges in education completion in the NICO Project area. Fortune's aim is to fill as many of the skilled positions and semi-skilled positions as possible with Aboriginal and northern workers during the NICO Project. Unskilled workers will receive on-the-job training to bring them up to an acceptable productivity level. As vacancies in skilled and semi-skilled positions occur, concerted efforts will be made to fill these positions with northern Aboriginal workers. Fortune will consider the experiences of individuals not meeting minimum education requirements for entry level positions on a case-by-case basis.		Construction Operation
16.2.7.2 - Results 16.2.7.2.2 - Education	Education completion rates are expected to be positively affected by the NICO Project with the following mitigation steps:		
Completion Rates	 Employees will be brought in at a level so that the person is able to do the work and remain safe. Fortune will be flexible with its minimum literacy requirement for employment for residents of the Wek'èezhìi Settlement Area and as long as safety can be maintained, workers will be accepted at all levels of proficiency, including pre-literate workers. Fortune will attempt to overcome these challenges by incorporating essential skills into safety training, technical training, and production planning. 		
	 Opportunities will be sought for new work entrants to be further developed for more advanced or diverse roles through on-the-job training and support for educational upgrading. On-the-job training will be provided in as many situations as possible to provide opportunities for Tłįchǫ residents. 		
	 Fortune will try to carry out relevant training programs that are offered in cooperation with other agencies in the Territory, such as the Mine Training Society and Aurora College. Discussions have begun with the Mine Training Society to seek training opportunities, although issues about academic preparedness still need to be addressed. 		
	 Fortune will work diligently to engage with youth, particularly those who are Tłįchǫ. Fortune plans to attend career fairs, participate in classrooms, and develop relationships with schools. Summer employment will be offered to young people as well as work terms, and apprenticeship and training opportunities. 		
	Fortune will contribute to student achievement awards.		
16.2 - Socio-Economic Impacts	Fortune is committed to maintaining a drug-free workplace and promoting high standards of health and safety, and recognizes alcohol or drug dependency as a treatable condition. Several mitigation and benefit enhancement strategies will be implemented to reduce potential negative effects of substance abuse, as follows:		Construction Operation
16.2.7 - Effects to Health and Wellness	Fortune will provide workshops on money management, alcohol and substance abuse, family adaptation, and coping mechanisms.		
16.2.7.2 - Results 16.2.7.2.3 - Alcohol and Drug	• Employees who suspect they have an alcohol or drug dependency will be encouraged to seek advice and to follow appropriate treatment promptly before it results in job performance problems. Medical staff will advise and assist in securing treatment.	Managamant	
Access and Use	• Fortune will conduct "for cause" testing; circumstances might include such things as reasonable suspicion that an employee may be in violation of the policy, reports from any witnesses, bizarre, unsafe, or threatening behaviour on the employee's part, or involvement in a work-related accident.	Design Feature Monitoring	
	 No employee with alcohol or drug dependency will be terminated due to the request for help in overcoming that dependency or because of involvement in a rehabilitation; however, an employee who has had or is found to have a substance abuse problem will not be permitted to work in designated positions identified as being critical to the safety and wellbeing of employees, the public, or Fortune. 		
	• Even with these mitigation measures, some substance abuse can be expected to occur, particularly when an employee or contractor is off-site. This situation is not the responsibility of Fortune or within its power to prevent. As such, Fortune will work with local study area communities to develop and implement strategies to limit negative health outcomes such as increased alcohol and drug consumption.		
16.2 - Socio-Economic Impacts 16.2.7 - Effects to Health and Wellness 16.2.7.2 - Results 16.2.7.2.5 - Crime Rates	While Fortune has limited or no control over crime rates off-site, in working with community leaders and government health and education officials, Fortune hopes to mitigate any potential negative outcomes due to increased access to money. As a part of its interest to see the local study area communities prosper, Fortune will continue to engage with the communities and their leadership throughout the operational life of mine. Sponsorship of community events and promotion of activities will improve life for community members. Fortune believes that its role in helping to bring greater health and vibrancy to the local study area is their best approach to mitigating negative social outcomes, which includes the rate and severity of crime.	Management Monitoring	Operation





Section	Commitment Description	Commitment Type	Project Phase
16.2 - Socio-Economic Impacts	Fortune will implement the following mitigation and benefit enhancement strategies to reduce potential negative effects of limited access to childcare and to maximize women's participation in the NICO Project:		
16.2.7 - Effects to Health and Wellness 16.2.7.2 - Results 16.2.7.2.6 - Access to	• The potential for shorter shift rotations due to the proximity of the site to some local study area communities may offer more opportunities for women with young children to enter the workforce.	Management	Operation
	 Potential exists for secondary employment that may be generated in the communities themselves as a result of the NICO Project; this possibility may add flexibility for women to enter the workforce. 	Environmental (Design Feature	Operation
Childcare	Fortune will develop a strategy directed at women to create more opportunities or remove barriers to women working at the site.		
16.2 - Socio-Economic	Mitigation measures by Fortune for language retention and other key indicators of cultural maintenance include the following:		
Impacts 16.2.7 - Effects to Health and	• Fortune will make every effort to support the culture and language on the worksite, including offering cultural sensitivity workshops, which will be done in collaboration with the Tłįchǫ.		
Wellness 16.2.7.2 - Results	 Any Tłįchǫ employee who does not have knowledge of the English language, either written or verbal, will be given reasonable opportunities, where the lack of language does not compromise the safety of the individual or of others or work performance. 	Management Environmental	Operation
16.2.7.2.7 - Language	Tłįchǫ speaking counselors will be hired for employees and their families, and translation of policies and important documents to Tłįchǫ language will be done, where feasible.	Design Feature	
Retention and Other Key Indicators of Cultural Maintenance	• Through policy development and practices, Fortune will also be sensitive to the culturally-extended family kinship ties; in other words, absence from the site for cultural or family needs will be considered on a case by case basis.		
16.2 - Socio-Economic Impacts	Fortune requires that all employees take cultural awareness and cross-cultural training. Fortune will take the following specific mitigation steps to reduce negative effects related to cultural interactions and to enhance links to community to the extent possible:		
16.2.7 - Effects to Health and Wellness	 through its employee benefits package, offer counseling and mentoring to employees who pursue it; 	Management Environmental	
16.2.7.2 - Results	allow employees to continue speaking their traditional language on-site if it does not pose a health or safety issue;		
16.2.7.2.8 - Community	• provide quality accommodations for permanent employees on-site with two people per room during construction and single individual rooms after the construction phase;		
Cohesiveness and Pride in Cultural Identity	 provide quality food services with nutritional food, with options that will include country food (when available); 		
oundrainaonnay	• provide communication links for employees to maintain relationships with their families while at site, such as telephone and internet; there will also be cell phone satellite coverage;		Operation
	 provide indoor and outdoor recreation and leisure options on-site for a relaxing and healthy lifestyle while away from home; 	Design Feature	Operation
	• provide a family and employee assistance program should they encounter stress associated with their work or other family concerns, including relationships, family, youth, and elder care;	Ũ	
	 hold annual open house days; community members and employee families will be invited to visit the site and see where people work; 		
	 provide workshops on money management, alcohol and substance abuse, and family adaptation and coping mechanisms; 		
	 provide cultural sensitivity training to all employees to reduce work-related stress in a cross-cultural work environment; and 		
	 offer a volunteer incentive, which employees can apply for; these will be provided to those employees interested in volunteering their time for social or cultural programs or activities in their home communities. 		
16.2 - Socio-Economic	Fortune will consider several mitigation measures to reduce the risk of accidents and improve public safety, including the following:		
Impacts 16.2.8 - Effects to Public	offering driver training for truck drivers;		
Safety	 making road improvements (if determined to be necessary) on the NPAR; 		
	applying and monitoring strict controls on speed limits;	Management	
	advising communities about approximate time trucks will be passing;	Environmental	Operation
	minimizing commuter traffic, especially at night;	Design Feature	
	• implementing contingency and emergency response procedures, including for spill clean-up and medical emergencies, to reduce the consequences of an accident;		
	using only transportation contractors with proven safety records; and		
	 mitigation measures applied for the local roads will also be applied to the regional highways. 	1 !	





Section	Commitment Description	Commitment Type	Project Phase
16.2 - Socio-Economic Impacts	Fortune's mitigation strategy is a plan designed to help potentially-affected communities adjust to economic fluctuations, including unforeseen early closure or project hiatus, and to assist the post- closure transition for mine employees, Fortune commits to the following measures:		
16.2.9 - Economic Effects from Closure	• design and implement a targeted communications strategy, including a Media Management program, for an effective, ongoing community consultation and engagement process;		
	 regularly meet with different business, educational, civil, and local government organizations to begin and/or maintain 2-way communication, including providing information on and discussing the NICO Project operations, lifecycle, and closure plans; 		
	hold company-community meetings with all 3 levels of government (community, territorial, federal), and build consensus through meaningful discussions that foster trust and collaboration;		
	 support sustainable communities to the extent possible by investing in communities and employees; 		
	improve employee and business capacity building through continued training and transferable skills development;		
	develop a Human Resources Closure Plan and a Sustainable Development Strategy;	Management	
	• form a mine closure committee during operations. The committee will consist of staff and employees, with responsibilities that include how to best support employees with mine downsizing and eventual closure. This committee will also deal with any issues related to unforeseen early closure or project hiatus;	Environmental Design Feature	Closure
	establish a transition centre with the following tasks and objectives:		
	maintain a database of all employees and their respective skills and training;		
	provide access to government programs for further training or for Employment Insurance;		
	arrange financial planning and employment information sessions for all employees;	1	
	help with resume writing, job searching, and job interviewing skills;		
	contact other mining companies to recommend employees and contractors to other projects; and		
	involve all potentially-affected communities in the process.		
16.2 - Socio-Economic Impacts 16.2.12 - Uncertainty	Fortune's adaptive management systems to deal with issues identified during monitoring will: incorporate knowledge from multiple sources, make use of multiple systems models, and support new forms of cooperation among stakeholders. Any opportunity for improvement will be acted upon accordingly. Fortune will liaise with relevant federal, territorial, and Tłįchǫ Government agencies, and relevant transportation, health, social, education, and other relevant regional agencies in the planning process and during construction and operations.	Management Monitoring	Construction Operation
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up	Ongoing dialogue (community consultation and engagement) with people interested in the NICO Project to gain a mutual understanding of the closing out phases and the timing is central to Fortune's C&R Plan. The company will also meet with different business, educational, social, and local government organizations individually to initiate 2-way communication and provide information on the NICO Project's operations, lifecycle, and closure plans. Fortune will work to support sustainable communities as much as possible. Capacity building, training, and development will be designed for mobility. Employability will be a key element of the opportunities that are offered to employees or prospective employees.		
	As part of the closure planning, a closure committee will be formed in adequate time prior to closure to plan for some of the issues that employees would be facing because of the closure. The committee will consist, in part, of employees. Some of their key responsibilities will be to consider how to best support employees with the downsizing. A Transition Centre will be set up (specific location subject to negotiations with the Tłįchǫ) to include the following:		
	create a database of all employees and their skills and training;	Management	Clearura
	practice interview skills;	Monitoring	Closure
	provide access to government programs for further training or for Employment Insurance;		
	help transition employees to other mining projects;		
	arrange financial planning and employment information sessions for all employees; and		
	help with resume writing, job searching, and job interviewing skills.		
	All Wek'èezhìi Settlement Area communities will be involved in the process with meetings involving the communities and all 3 levels of government, and there will be a building of consensus through meaningful discussions that foster trust and collaboration.		
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up 16.2.13.1 - Human Environment Monitoring and Management Plans 16.2.13.1.1 - Income and Money Management	Fortune will assist every new employee in opening a bank account if they do not already have one.	Management	Operation





Section	Commitment Description	Commitment Type	Project Phase
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up 16.2.13.1 - Human Environment Monitoring and Management Plans	Fortune's Employee and Family Assistance Program will support all employees when working at the mine site. This program will be designed for those who encounter stress associated with their work or other family concerns including relationships, family, youth, and elder care. Consideration will be given to work with the provider to make available more Aboriginal speaking counselors for employees and their families. Also, if an employee terminates their employment due to family or personal issues, Fortune will try to re-hire the employee after a reasonable period. The NICO Project will also be providing transportation by road for the employees in the communities that are accessible by road (i.e., What) and Behchokỳ early in the NICO Project and likely Gamètì later on as the road goes through to the community).		
	Other specific mitigation steps will be taken to reduce negative effects associated with long-distance commuting and stress management, and to support community and family relationships, including the following:		
16.2.13.1.2 - Stress Management and Support	Provide quality accommodations for permanent employees on-site with 2 people per room during construction and single individual rooms after the construction phase.		
Programs	Fortune will provide quality food services with nutritional food in consultation with the employees.	Management	
	• Fortune will provide communication links for employees to maintain relationships with their families while at site, such as the internet (e.g., Skype, e-mail). There will also be cell phone satellite coverage. Computers will be available for ongoing learning and training through computer based programs.	Environmental Design Feature Monitoring	Operation
	 Fortune will provide indoor and outdoor recreation and leisure options on-site for a relaxing and healthy lifestyle while away from home. A Recreation coordinator will be responsible for scheduling a varied daily program that will appeal to those looking to exercise before or after their shift. A gymnasium will be part of the living complex to provide workers with opportunities for exercise. 	Monitoring	
	 A living complex will be available, and decorated with traditional art from the Tłįchǫ communities. A library will be part of the living complex with reading materials and movies, some of which will be based on the Tłįchǫ culture. 		
	Fortune will hold annual open house days to invite community members and employee families to visit the site and see where people work.		
	Fortune will provide workshops on money management, alcohol and substance abuse, and family adaptation and coping mechanisms.		
	Fortune will provide cultural sensitivity training to all employees so as to reduce work-related stress in a cross-cultural work environment.		
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up 16.2.13.1 - Human Environment Monitoring and Management Plans	Fortune is committed to maintaining a drug-free workplace and promoting high standards of health and safety. It will be a violation for any employee to use, possess, distribute, manufacture, sell, trade, or otherwise engage in the illegal use and/or consumption of prohibited and mood altering substances (including, but not limited to, alcohol, marijuana, and other illegal substances) at or in the workplace. Fortune will conduct "for cause" testing. Such circumstances might include such things as reasonable suspicion by a supervisor that an employee may be in violation of the policy, reports from any witnesses, bizarre, unsafe, or threatening behaviour on the employee's part, or involvement in a work-related accident.		Operation
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up 16.2.13.1.3 - Substance Abuse and Treatment Policies	Fortune recognizes alcohol or drug dependency as a treatable condition. Employees who suspect they have an alcohol or drug dependency will be encouraged to seek advice and to follow appropriate treatment promptly before resulting in job performance problems. The NICO Project medical staff will advise and assist in securing treatment. No employee with alcohol or drug dependency will be terminated if they request help in overcoming that dependency or because of involvement in a rehabilitation effort. An employee who has had or is found to have a substance abuse problem, however, will not be permitted to work in designated positions identified by management as being critical to the safety and wellbeing of employees, the public, or Fortune.	Management Monitoring	Operation
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up	Fortune will promote positive regard for all people through cross-cultural training and avoidance of cross-cultural conflicts at the worksite to develop positive and constructive relationships between Aboriginal and non-Aboriginal people. This will involve promoting: understanding of Aboriginal people, their culture, and their communities; healthy and productive cross-cultural partnerships; and increased employees' knowledge of the Aboriginal culture. Fortune will employ the services of elders from the Tłįchǫ communities for this purpose as well as Aboriginal companies. Training opportunities that are being reviewed currently include the following:		
16.2.13.1 - Human	community education;		
Environment Monitoring and Management Plans	community wellness events;	Management	
16.2.13.1.4 - Cross-Cultural	cross-cultural strategic planning and training;	Environmental Design Feature	Operation
Training	front-line skill development;	Monitoring	
	peer support and counseling;	1	
	professional development;	1	
	team building and facilitating community partnerships; and	1	
	workplace wellness training.	1	1





Section	Commitment Description	Commitment Type	Project Phase
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up 16.2.13.1 - Human Environment Monitoring and	Fortune will implement human resources information systems to effectively capture any changes to recruitment, vacancies, training received, shifts and rosters, and any information related to employees. While information about any individual will be confidential, cumulative summaries will be developed monthly and reported on a regular basis.		
	 All employees will be asked, at hiring time, to self-disclose information on their ethnicity, place of residence and Aboriginal status to determine the total number of workers and the numbers and percentages of those from the Tłįchǫ communities and other Aboriginal or northern resident workers. During construction these will be monitored on a "number of days worked" basis. Training hours will be tracked and reported by categories such as on-the-job training, external training, and apprenticeships. 	Management Monitoring	Operation
Management Plans 16.2.13.1.5 - Employment and Training	 In addition, an IBA to be negotiated with the Tłįchǫ will be a comprehensive tool to include hiring and training of Aboriginal people. 		
16.2 - Socio-Economic Impacts	All business providing goods and services to the NICO Project will be tracked including types of business participating in construction and the value of the business. Semi-annually, this information will be reviewed and gaps identified to maximize Aboriginal business participation.		
16.2.13 - Ongoing Engagement and Follow-up 16.2.13.1 - Human	Issues and concerns associated with the socio-economic environment will be addressed through plans that support the Environmental Health and Safety management system, such as the community relations plan. Potential adverse effects will be monitored such as new business opportunities that, while positive for contractors and their employees, may generate a shortage of local skilled workers in the community.	Management	Operation
Environment Monitoring and Management Plans 16.2.13.1.6 - Local Businesses	In addition, an IBA to be negotiated with the Tłįchǫ will be a comprehensive tool that will address the benefits for local and regional businesses. Implementation and monitoring of the IBA will assist organizations and businesses servicing the region, particularly helping them to counter mobilization of local skilled labour away from the Tłįchǫ communities and associated impacts on maintenance of infrastructure and basic service provision. This can be done through training, rotational flexibility, and other measures to be developed with the smaller communities in the local study area.		
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up 16.2.13.1 - Human Environment Monitoring and Management Plans 16.2.13.1.7 - Employee Retention	Employee retention will be monitored and analyzed monthly through human resource information systems. The company will review hiring and termination of workers to determine an annual rolling forward turnover rate. This statistic will be reviewed regularly to determine the underlying causes of turnover to seek mitigation strategies other than those already in place, such as the cultural sensitivity workshops and company communications channels, the availability of an Aboriginal human resources professional, and Aboriginal liaison. Particular attention will be given to address any increase in turnover rates for Aboriginal people.	Monitoring	Operation
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing	The Department of Health and Social Services and Health Canada provide funding to support NWT community wellness programs. These programs work to improve the well-being of NWT children, families, and communities. Fortune will meet with the local staff of the service providers and agencies on an ongoing basis to both provide and share relevant information. The site medical staff will make ongoing contact with local health officials to both report any relevant concerns and also to make Fortune aware of any issues.		
Engagement and Follow-up 16.2.13.1 - Human Environment Monitoring and	Through its adaptive management system, Fortune will incorporate knowledge about worker and family wellness from multiple sources, make use of multiple systems models, and support new forms of cooperation among stakeholders. When an opportunity for improvement is found, it will be acted upon accordingly. At the site level, Fortune will monitor concerns brought forward by the medical staff, by community employees, and information gathered at community visits.		
Management Plans 16.2.13.1.8 - Worker and	Worker and family wellness will be specifically monitored in several ways, including the following:		
Family Wellness	 monthly reports from the Employee and Family Assistance program will be prepared, advising the number and type of contacts and any notable patterns or concerns; 	Monitoring	Operation
	 Fortune will communicate and collaborate with community health care providers in the potentially-affected communities for any concerns or changes to worker and family wellness that might require mitigation. These changes may be noted by indicators such as increased clinic visits, the number of new cases opened, increased alcohol and drug addiction issues, and any changes to the number of children in care in a community; 		
	• worksite medical personnel will provide support services to those with health issues. They will also monitor Fortune's commitment to healthy diet and nutrition and the availability of country food;		
	Fortune will monitor time lost due to illness; and		
ſ	• statistics on the termination of Fortune employees related to homesickness, rotational employment, and emotional stress factors will be gathered through exit interviews and follow up.		





Section	Commitment Description	Commitment Type	Project Phase
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing	A Socio-Economic Monitoring Plan will be designed to determine the effectiveness of Fortune's mitigation measures. The Socio-Economic Monitoring Plan will supplement, not duplicate, areas covered by the IBA to be negotiated for this project. Moreover, the Socio-Economic Monitoring Plan must provide for engaging the potentially-affected communities of Behchoko, Whati, Gameti, and Wekweeti. In particular, the plan will be designed to include the following:		
Engagement and Follow-up 16.2.13.2 - Contributions to	 monitoring will be done through proactive policies and procedures early in the NICO Project; 		
Beneficial and Adverse	determine the effectiveness of the measures in reducing adverse effects and enhancing positive ones associated with the NICO Project;		
Social Impacts	show where adjustments in those measures need to be made;		
	help Fortune adjust, augment, or replace measures to correct any adverse effects; and		
	work in partnership with government and Aboriginal organizations to collect, analyze, and interpret information related to the impacts of the NICO Project.	Manitaring	Onenation
	A key feature of the Socio-Economic Monitoring Plan will be its ability to be modified and improved through experience and input. The plan will direct those responsible for its implementation to undertake the following actions throughout the lifetime of the NICO Project:	- Monitoring	Operation
	 verify the accuracy and completeness of the socio-economic effects described in the DAR; 		
	monitor the effectiveness of planned mitigation measures;		
	identify additional adverse effects;		
	review the effectiveness of data gathering;		
	modify the Socio-Economic Monitoring Plan to improve its effectiveness; and		
	 share information about the effectiveness of the plan with Fortune personnel, contractors, community service agencies, and Tłįchǫ community residents. 		
16.2 - Socio-Economic Impacts 16.2.13 - Ongoing Engagement and Follow-up	A Committee to oversee the effectiveness of Fortune's mitigation procedures and monitor socio-economic effects will be convened after a favourable decision to proceed with the NICO Project is given. The Committee will be comprised of representatives from interest groups affected by the construction, operation, and closure of the NICO Project. Representatives will include Fortune personnel, Department of Health and Social Services, the RCMP, representatives from some or all of the Tłįchǫ communities, and representatives of associations and organizations, and territorial, regional, and local and Tłįchǫ governments. Those who serve on the Committee must agree to contribute to data gathering and information sharing in their "sphere of influence".	Management Monitoring	Construction Operation Closure
16.2.13.2 - Contributions to Beneficial and Adverse Social Impacts	In its ongoing work with the Tłįchǫ, Fortune has been communicating with the Tłįchǫ Government's Kwe Beh Working Group, recently established to manage relationships with mining companies in Mowhi Gogha De Niitl'ee. Fortune will continue to build its relationship with the Kwe Beh Working Group, whose mandate includes matters of direct relevance to the NICO Project.		
16.3 - Physical Heritage	Fortune environmental design features for effects to Physical Heritage due to the NICO Project include:		
Resources 16.3.3.2 - Mitigation	construction and operation activity leading to ground disturbance that affects physical heritage resources;		
Proposed Mine Site	completed archaeological assessment for areas that are considered likely to contain heritage resources;	Management	
Development	avoid previously recorded heritage resource sites;	Environmental Design Feature	Construction Operation
	• complete additional archaeological assessment for any changes to NICO Project footprint in areas considered to have moderate to high potential to contain heritage resources;	Monitoring	operation
	 monitor condition of known heritage resource sites near the NICO Project footprint; and 		
	provide awareness training and a manual for recognizing heritage resources to construction crews		
16.3 - Physical Heritage	Fortune environmental design features for effects to Physical Heritage due to the proposed NPAR include:		
Resources 16.3.3.2 - Mitigation	construction and operation activity leading to ground disturbance that affects physical heritage resources;		
Proposed NICO Project	completed archaeological assessment for areas that are considered likely to contain heritage resources;	Management	
Access Road	avoid previously recorded heritage resource sites;	Environmental Design Feature	Construction Operation
	complete additional archaeological assessment for any changes to NICO Project footprint in areas considered to have moderate to high potential to contain heritage resources;	Monitoring	Speration
	 monitor condition of known heritage resource sites near the NICO Project footprint; and 		
	 provide awareness training and a manual for recognizing heritage resources to construction crews. 		





Section	Commitment Description	Commitment Type	Project Phase
16.3 - Physical Heritage	Fortune environmental design features for effects to Physical Heritage due to the proposed borrow source include:		
Resources 16.3.3.2 - Mitigation	 construction and operation activity leading to ground disturbance that affects physical heritage resources; 		
Proposed Borrow Source	 completed archaeological assessment for areas that are considered likely to contain heritage resources; 	Management	
•	avoid previously recorded heritage resource sites;	Environmental Design Feature	Construction Operation
	• complete additional archaeological assessment for any changes to NICO Project footprint in areas considered to have moderate to high potential to contain heritage resources;	Monitoring	operation
	 monitor condition of known heritage resource sites near the NICO Project footprint; and 		
	 provide awareness training and a manual for recognizing heritage resources to construction crews. 	1	
16.3 - Physical Heritage	Fortune environmental design features for construction and operation activity leading to impacts on heritage resource sites in the vicinity of the Idaà Trail or Hislop Lake include:		
Resources 16.3.3.2 - Mitigation	 reduce visibility of the NICO Project components from identified physical heritage resource (Idaà Trail, Hislop Lake); 	Management	
Proposed NICO Mine Site	 monitor condition of known heritage resource sites near the NICO Project footprint; and 	Environmental	Construction
Development, NICO Project Access Road, and Borrow Source	 provide awareness training and a manual for recognizing heritage resources to construction crews 	Design Feature Monitoring	Operation
16.3 - Physical Heritage Resources 16.3.3.2 - Mitigation Construction and Operation Activity Leading to Impacts on Heritage Resource Sites in the Vicinity of the Įdaà Trail and Hislop Lake: Proposed NICO Mine Site Development, Access Road, and Borrow Sources	Construction and operation activities of the proposed NICO Project will avoid known physical heritage resources in the vicinity of the Idaà Trail and Hislop Lake. No ground disturbance is anticipated to occur outside of the local study area (i.e., NICO Project footprint). Hislop Lake and the physical heritage resources sites associated with its shoreline are located west and outside of the NICO Project footprint; as such, no impacts to physical heritage resources sites associated with Hislop Lake are anticipated. The Idaà Trail is also located outside of the proposed mine NICO mine site, access roads and borrow source footprints, no impacts to the Idaà Trail by NICO Project activities are anticipated. Although, the Idaà Trail is bisected by the NPAR, no impacts to heritage resources sites are anticipated. Shovel testing conducted on the south bank of the Marian River as part of the assessment of KjPo 44, revealed no heritage resources in association with the NPAR and bridge rights-of-ways. No known heritage resource sites occur within the NICO Project footprint or the NPAR. No residual effects would result because no physical effects on heritage resource sites would occur.	Environmental Design Feature Monitoring	Construction Operation
16.3 - Physical Heritage Resources 16.3.7 - Monitoring	In addition to the awareness training and manual for recognizing heritage resources provided to construction crews, monitoring of the condition at known heritage resource sites near the NICO Project footprint will also occur. In the unlikely event that previously unrecorded heritage resources are uncovered during the construction of the NICO Project, staff of the Prince of Wales Northern Heritage Centre will be contacted immediately and a heritage resource management plan would be developed with guidance from Prince of Wales Northern Heritage Centre.	Monitoring	Construction Operation
16.4 - Traditional Land Use	Fortune is planning the following design features and mitigations plans to address the possibility that the NICO Project may affect the availability of wildlife (including fish) for harvesting or viewing.		
General construction and operation of mine and	cultural awareness programs;		
supporting infrastructure	 impacts on wildlife will be managed by site environmental staff and through meetings and interviews with the local residents; 		
	hunting, trapping, or recreational fishing will be prohibited by staff or contractors at the NICO mine site, or when on the NPAR for work purposes;		
	the recreational use of all-terrain vehicles will be prohibited on-site;		
Table 16.4-1	• Fortune is committed to having discussions with hunters and trappers who approach Fortune with a case that their hunting and trapping practices have been compromised by the NICO Project;		
Potential Pathways for Traditional Land Use Effects	Fortune will hire Tłįchǫ people to perform the monitoring on-site whenever possible, and assist in the design of monitoring programs;		
	 by relocating the hydrometallurgical facility and adjusting the process design, the amount of water used by the NICO Project will be decreased and less water will be discharged from the NICO Project; and 	Environmental Design Feature	Construction Operation
	the selected CDF has the smallest footprint of the 3 considered alternatives.	Monitoring	Operation
	Fortune is planning the additional following design features and mitigations plans to address the possibility that the NICO Project may affect traditional activities at Hislop Lake, and other locations.		
	Fortune has added 2 water quality stations in Hislop Lake to satisfy concerns over water quality in that lake and will add one water quality station in Behchoko;		
	 Fortune is planning the following design features and mitigations plans to address the possibility that the NICO Project may be visually and audibly perceived from the Idaà Trail, including the Marian River and Hislop Lake, and affect the experience of traditional authenticity by the trail users; 		
	CDF was designed so that it would not be higher than the surrounding hills and consequently the NICO Project will not visible from Hislop Lake or the Idaà Trail;		
	mufflers will be used on mining equipment; and		
	blasting will be limited to 1 blast/day.		





Section	Commitment Description
16.4 - Traditional Land Use General construction and	Fortune is planning the following design features and mitigations plans to address the possibility that the NICO Project may affect traditional harvesting activities for Aborig Wek'eezhii Settlement Area communities due to changes in access for resident and non-resident hunters.
operation of mine and supporting infrastructure	 Hunting, trapping, or recreational fishing will be prohibited by staff or contractors at the NICO mine site, or when on the NPAR for work purposes. The recreational use of site will be prohibited, so that people working on-site will not benefit from increased access to the region (e.g., construction or travel).
	• Fortune is committed to having discussions with hunters and trappers who approach Fortune with a case that their hunting and trapping practices have been compromi
16.4 - Traditional Land Use 16.4.2 - Summary of Effects	Environmental design features and mitigation, as well as current wildlife management practices used on the Ekati, Diavik, and Snap Lake mine sites will be implemented at limit wildlife injury and mortality. Environmental design features and mitigation that will be implemented at the NICO Project include the following:
on Traditional Harvesting Activities	 blasting will be temporarily suspended when wildlife are spotted within the "safe zone";
Section 8 Caribou	the CDF will be regularly monitored for wildlife activity and wildlife hazards;
Mitigation and Monitoring	reflectors or other deterrents will be installed to discourage wildlife from crossing the roads;
Section 15 - Wildlife Mitigation and Monitoring	ditches will be contoured at closure as appropriate to remove any hazards to wildlife;
9.4.4.4 - Closure and	wildlife deterrent measures will be implemented by knowledgeable and trained personnel; and
Reclamation	at closure, Borrow Sites, the Plant area, stockpile areas, etc. will be re-contoured to reduce hazards to wildlife.
16.4 - Traditional Land Use 16.4.2 - Summary of Effects on Traditional Harvesting Activities 16.4 - Traditional Land Use	Although the NICO Project may result in measurable changes to angler access in the region, effects will be reduced using appropriate environmental design features and the possible effects of increased fishing from new angler access, Fortune will not permit recreational fishing by their staff or contractors at the NICO mine site, or when on purposes (e.g., construction or travel). If concerns regarding over-fishing along the NPAR do arise, non-traditional fishing may be managed through waterbody-specific regulates along the Ingraham Trail have restrictions on possession of trout). Traditional fishing may be managed by the Wek'ezhíi Renewable Resource Board. Importantly, the decommissioned following closure so that access will be restricted into the future, unless otherwise negotiated with the Tłįchǫ Government.
16.4.2.2 - Fish Mitigation and Monitoring	Fortune has also made a commitment to the following mitigations and monitoring plans:
and Monitoring	Fortune will have a monitoring program in place to check water quality;
	• Fortune will add a baseline water quality station at Behchoko that will be monitored prior to and during operation of the mine to demonstrate water quality;
	Fortune added 2 water quality stations in Hislop Lake to satisfy concerns over water quality in that lake; and
	• Fortune has committed to developing a monitoring program with the help of the Tłįcho that will examine the health of streams and lakes potentially affected by the mine
16.4 - Traditional Land Use	Fortune has also made the following mitigation commitments:
16.4.2 - Summary of Effects	• Fortune will hire Tłįchǫ people to perform the monitoring on-site whenever possible, and assist in the design of monitoring programs; and
on Traditional Harvesting Activities 16.4.2.3 - Vegetation Mitigation and Monitoring Section 14	Monitoring programs will be designed to reduce uncertainty of effects related to changes from the NICO Project.
16.4 - Traditional Land Use	Fortune has also made a commitment to specific mitigations and monitoring programs as follows:
16.4.2 - Summary of Effects on Traditional Harvesting	• Fortune is committed to having discussions with hunters and trappers who approach Fortune with a case that their hunting and trapping practices have been compromi
Activities	Fortune will hire Tłįchǫ people to perform the monitoring on-site whenever possible, and assist in the design of monitoring programs;
16.4.2.4 - Other Wildlife	Fortune has also made a commitment of mitigating dust generation on the road to minimize potential impacts on plant and animal life;
Mitigation and Monitoring	Fortune has completed initial site visits for the Elders of all communities to assist in the design of site monitoring plans; and
	• Fortune will not permit hunting, trapping, harvesting, or fishing by staff and contractors and will prohibit the recreational use of all-terrain vehicles at site, so that people benefit from increased access to the region.



	Commitment Type	Project Phase
riginal residents of the	Environmental	Construction
e of all-terrain vehicles at	Design Feature Monitoring	Construction Operation
mised by the NICO Project.		
d at the NICO Project to	Environmental Design Feature Monitoring	Construction Operation
		Closure
nd mitigation. To manage on the NPAR for work regulations (for example, the /, the NPAR will be ne.	Environmental Design Feature Monitoring	Construction Operation Closure
	Monitoring	Construction Operation Closure
mised by the NICO Project; le working on-site will not	Monitoring	Construction Operation Closure



Section	Commitment Description	Commitment Type	Project Phase
16.4 - Traditional Land Use 16.4.3 - Effects from Noise and Visual Disturbances to Users of the Įdaà Trail Mitigation and Monitoring	Fortune has indicated that the CDF has been designed not to be higher than the surrounding hills and, consequently, not be visible from Hislop Lake or the Įdaà Trail; also, by building the CDF, the Mine Rock Management Area has been eliminated, reducing the visual impact of the NICO Project. The Mine Rock Management Area would have been visible from Marian River and Hislop Lake prior to these changes.		
	Fortune has taken measures to minimize the effects of sensory disturbances including the following:		Construction
	mufflers will be used on mining equipment;		Operation
	blasting will be limited to 1 blast/day; and		
	 the predictions for the NICO Project are considered conservative and follow-up noise monitoring will be done once the NICO Project is in operation to verify the modelling and resulting disturbance area, but long-term monitoring should not be necessary (Appendix 8.III). 		
16.4 - Traditional Land Use 16.4.4 - Sensory Effects on Traditional Authenticity for Įdaà Trail Users Mitigation and Monitoring	The CDF was designed so that it would not be higher than the surrounding hills and consequently not visible from Hislop Lake or the Įdaà Trail. Given that the Įdaà Trail follows the Marian River west of the NICO Project it is assumed that the NICO Project will not be seen from the Marian River; however, the NPAR will pass over the Marian River and thus will be visible from river at the point of crossing.	Environmental Design Features	Construction
17 - Subject of Note: Accide	ents and Malfunctions		
17.5 - Emergency Response	Fortune has developed a preliminary Emergency Response and Spill Contingency Plan (ERSCP) for the NICO Project. In general Fortune's preliminary ERSCP has considered the following:		
and Spill Contingency Plan	a safe environment for all employees, contractors, visitors and neighbours;		
(see Appendix 3.VI)	that activities are conducted in an environmentally responsible manner consistent with environmental regulations, guidelines and best practices;	Management Monitoring	
	the identification and management of significant environmental risks;		Construction
	the existence of a comprehensive system for managing emergencies and a high degree of emergency preparedness;		Operation
	that the response to emergencies is predicated primarily on the preservation of human life and the safety of emergency response personnel;		Closure
	the containment of emergencies and their effects within facility boundaries;		
	co-operation with external emergency response organizations; and		
	a safe return to normal operations.		
17 – Accidents and Malfunctions	The preliminary ERSCP addresses human-caused emergencies and natural disasters that threaten life, the environment and/or property, and that are beyond routine operational control. The document continues to be refined. As a minimum, the final ERSCP will address the following:		
Appendix 3.VI	on-site and off-site spills;		
	tailings pipeline rupture;		
	failure of the CDF;		
	pit wall failure;		
	underground head failure;		
	extreme drought;	Management	Construction
	extreme precipitation, including effects on the CDF and Open Pit;	Monitoring	Operation Closure
	plane crash;		Clobald
	bus crash;		
	pressure vessel failure;	1	
	facility fires;		
	serious injury or fatality on-site and off-site;		
	earthquakes; and		
	on-site forest fires.		





Section	Commitment Description	Commitment Type	Project Phase
18 - Biophysical Manageme	nt and Monitoring Plans		
18.2 - Summary of Community Engagement	Fortune has established relationships with the Tłįchǫ Government and local communities and has been interacting with their representatives since the first land use permit. Fortune has maintained a record of communications which shows that the company has routinely provided timely information, both verbal and written, on the progress of the NICO Project development. Fortune will provide continuous updates on the NICO Project through direct participation and regular communication through community and site visits, regulatory meetings, public information sessions, annual reports, audit results, and the Fortune website.	I	
	Fortune believes it is essential that communities be involved with monitoring to judge how well Fortune is doing at reducing effects and improving environmental management. Fortune plans to involve communities in environmental monitoring by:		Constructior Operation
	developing monitoring programs that include input from communities, including people holding local and traditional knowledge;	wontoning	Closure
	developing monitoring programs that reflect community priorities and values;		
	 including community members in monitoring activities and hiring local residents as environment staff; 		
	presenting the results of monitoring with the communities; and		
	 providing an opportunity for communities to comment on the findings. 		
18.3 - Environmental Management System 18.3.1 - Proposed Framework	Fortune intends to implement an Environmental Management System incorporating the principles of adaptive management that reviews all monitoring information, identifies areas of concern, and then makes appropriate changes to the operation of the mine to reduce or remove effects to the biophysical environment. Included within the Environmental Management System are operational management plans, monitoring programs, specific issue monitoring programs and a monitoring response framework. The operational management plans should clearly define the steps in procedures used to manage various aspects of the mine that have potential to affect the environment and how to prepare for evens such as mine closure, emergencies and spills. The monitoring programs are intended to detect NICO Project-related effects to the surrounding biophysical environment. Specific issue monitoring may also be required to fill information gaps and are generally short-term. Information from all monitoring would flow into a Monitoring Response Plan. The Monitoring Response Plan would require documenting the following: information:	Monitoring	Operation
	a summary of environmental pathways and effects predictions from the NICO Project;		operation
	a description of how changes to the biophysical environment will be measured and considered;		
	a description of action levels and significance threshold, where available, for measurement endpoints (or indicator variables) of valued components; and	1	
	 a description of the mitigation and management actions that will need to be submitted if action levels are reached. 		
18.5 - Operational	Fortune has already developed a number of operational management plans for the NICO Project including:		
Management Plans and	 Mine Rock Management Plan (Section 3, Appendix 3.1); 		
Monitoring Programs	 Co-Disposal Facility Management Plan (Section 3, Appendix 3.II); 		
18.5.1 - Operational Management Plans	 Water Management Plan (Section 3, Appendix 3.III); 		
Management Plans	Waste Management Plan (Section 3, Appendix 3.IV);	Monitoring	Operation
	 Hazardous Substances Management Plan (Section 3, Appendix 3.V); 	g	Closure
	 Emergency Response and Spill Contingency Plan (Section 3, Appendix 3.VI); 		
	 Closure and Reclamation Plan (Section 9); and 		
	 Incineration Management Plan (Section 10.9.3). 		
18.5 - Operational Management Plans and Monitoring Programs 18.5.2 - Monitoring Programs	For the NICO Project, Fortune is proposing 4 biophysical monitoring programs which will be developed and completed with input from the communities and government and regulatory agencies. These include:		
18.5.2.1 - Air Quality Effect Monitoring Program	Air Quality Effects Monitoring Program will be implemented to determine if changes in air and dust emission parameters from the NICO Project are within concentrations predicted from air dispersion modelling. Mitigation and changes to mine operation may be suggested to reduce emissions and fugitive dust (Section 10.9).		Construction, Operation, Closure
18.5.2.2 - Aquatic Effects Monitoring Program	• Aquatic Effects Monitoring Program will be implemented to limit effects to aquatic components, including fish habitat, fish health and fish use to test impact predictions (Section 12 and Appendix 18.1).	Monitoring	Construction, Operation,
18.5.2.3 - Vegetation Monitoring Program	• Vegetation Monitoring Program will be implemented to monitor the re-vegetation techniques and success required during the NICO Project (Section 14.10).		Closure, Possibly Post-Closure
18.5.2.4 - Wildlife Effects Monitoring Program	• Wildlife Effects Monitoring Program will be implemented to provide a blueprint for wildlife effects monitoring and mitigation at the NICO Project (Section 8, Section 15, and Appendix 18.II).	1	Construction, Operation, Closure





Section	Commitment Description	Commitment Type	Project Phase
19 – Effects of the Environme	ent on the Development	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1 11400
	No commitments present.		
20 – Conclusion			
	No commitments present.		
Appendix 8.III - Noise Assess	sment		
8.III.3 - Pathway Analysis	During the development of the NICO Project environmental design features were incorporated by Fortune that reduce or eliminate potential impacts from noise, these include:	Environmental C	
8.III.3.2 - Environmental Design Features	 terrain changes (i.e., height of CDF and slopes of the Open Pit) to partly deflect or reduce noise by physical impediment; 		Construction
Design readines	 noise is partly deflected or reduced by buildings or other structures (i.e., structures situated between noise source and receptor); and 	Design Features	Operation
	 stationary equipment is housed inside buildings, thereby reducing the amount released into the environment provided doors are kept close. 		
Appendix 18.II - Conceptual	Wildlife Effects Monitoring Program		
18.II.1 - Introduction	Fortune's conceptual WEMP for the NICO Project outlines how Fortune proposes to reduce the direct and indirect effects to wildlife. The overall goals of the WEMP are to:		
	meet regulatory requirements and corporate commitments fro monitoring;		Construction
	 provide a process for regulators, communities and other people interested in the NICO Project to participate in the development and review of wildlife effects mitigation and monitoring; 	Management Monitoring	Operation
	 provide a process to provide results of monitoring to communities governments and the public; and 	literinterintg	Closure
	 provide mine managers with clear reasons for making decisions regarding environmental management. 		
18.II.1.1 - Objectives	The WEMP for the NICO Project will be designed to achieve the following objectives:		
	 provide information to test predicted impacts from the NICO Project DAR, and reduce uncertainty; 		Construction Operation Closure
	 implement environmental design features and mitigation to reduce the risks and disturbance to wildlife and wildlife habitat; 		
	determine the effectiveness of environmental design features and mitigation;		
	 Incorporate local traditional and ecological knowledge, where applicable and available; 		
	 propose action levels or adaptive management triggers that can be used as early warning signs for reviewing and implementing wildlife mitigation practices and policies; 		
	 design studies and data collection protocols that are consistent with other programs in the region; and 		
	consider existing regional and collaborative programs, such as Cumulative Impact Monitoring Program and the NWT Environmental Stewardship Framework.		
18.II.3 - Mitigation 18.II.3.1 - General Mitigation	Fortune is committed to remove or limit effects to wildlife and wildlife habitat. A summary of the environmental design fearless ad mitigation that will be implemented for the NICO Project include the following:		
	 limit the spatial extent of NICO Project footprint (i.e., anticipated mine site and NPAR); 		
	 promote natural re-vegetation and practice progressive reclamation; 		
	 remediate ad decommission the site when mining operations are complete; 		
	 skirt all buildings to the ground to limit opportunities for animals to find suitable shelter; 		
	locate noisy equipment inside buildings or underground;		
	 house the incinerator in an enclosed structure to improve combustion and reduce the availability of attractants while garbage awaits incineration; 	Environmental	Construction
	 use double-walled containers or single -walled container in lined containment areas for all fuel storage; 	Design Features	Operation
	 provide spill containment supplies in designated areas; 		
	use a fuel transfer house with double-locked mechanisms;		
	 use culverts and other design features that reduce changes to local flows, drainage patterns and drainage areas; 		
	capture and reuse site water to reduce fresh water requirements;		
	recycle and treat excess water from the SCPs prior to release;		
	 use high efficiency scrubbers in processing equipment to limit emissions of particulate matter; 	7	
	 use dust control systems on rock crushing and other dust generating equipment; 		





Section	Commitment Description	Commitment Type	Project Phase
18.II.3 - Mitigation	 enforce speed limits and use water on roads during summer and fall to suppress dust; 		
18.II.3.1 - General Mitigation (continued)	manage and isolate attractants, particularly food waste;		
(continued)	 report raptor nesting activity observed within 1.5 kilometres of the NICO Project to the Department of Environment and Natural Resources (ENR); 		
	• if feasible, clear land only outside of the breeding season for migratory birds (15 May through 31 July) for all facilities where migratory birds may nest;		
	 report all relevant observation of wildlife (particularly of caribou, fox, wolverine, and black bear) to environment staff; 		
	 implement an effective Waste Management Plan, particularly as it related to the disposal of food waste; 		
	 identify and monitor birds nesting on NICO Project infrastructure; 		
	 prohibit hunting, trapping, harvesting, and fishing by site employees and contractors; 		
	contact ENR to receive additional direction regarding new issues that arise;		
	 provide wildlife the right-of-way; 		
	• enforce a minimum flying altitude of 300 metres above ground level (except during take-off and landing and aerial surveys) for cargo and passenger aircraft outside of the NICO Project;		
	enforce a minimum flying altitude of 300 metres for helicopters, whenever possible;		
	 restrict vehicle use to designated roads and prohibit recreational off-road use of vehicles; 		
	 use signage and radio to warn drivers when wildlife move through an area; and 		
	 suspend surface blasting temporarily if large mammals are observed within the danger zone identified by the blast supervisor. 	_	
18.II.3 - Mitigation	Fortune is committed to using humane wildlife control methods that keep both humans and wildlife safe including wildlife deterrent actions. For deterrents to be successful there must be:		
18.II.3.2 - Deterrent Actions	 knowledgeable, trained personnel who will select corrective deterrent actions based on each wildlife situation; 		
	consistent application of deterrents;	- Monitoring	
	effective implementation of the Waste Management Plan;		Construction
	 safe and effective methods to prevent the presence of continuous presence of wildlife within the anticipated NICO Project Lease Boundary; 		Operation
	 procedures to remove wildlife from the Airstrip or roads during an emergency; 		
	 the absence of food, shelter and other rewards for animals that investigate the site; and 		
	 evaluation of every deterrent action to determine the reason for the animal's presence and the method it used to gain access to a hazardous area. 		
18.II.3 - Mitigation	Fortune commits to the following mitigation to protect caribou:		
18.II.3.3 - Caribou Protection	hunting by NICO Project staff and contractors will be prohibited while on-site;		
Section 8	 all incidents involving deterrent action, interaction and injury of caribou will be reported; 		
	all sightings of caribou will be reported to the environment staff on-site;	Management	Construction
	 caribou will not be blocked from crossing NICO Project roads and the Airstrip; 		Operation
	 if caribou are crossing or attempting to cross the NPAR or site roads, then traffic will stop and wait for them to cross; and 		
	 caribou will only be herded away from roads or the Airstrip in specific circumstances, such as an emergency. 		
18.II.3 - Mitigation	Fortune's Waste Management Plan for the NICO Project contains the following wildlife-specific mitigation strategies:		
18.II.3.4 - Waste	 follow procedures outlined in the Waste Management Plan and the Emergency Response and Spill Contingency Plan; 		
Management	 no littering policy; 		
Section 3	 no feeding of wildlife policy; 	Management	
	 separate food waste and non-food waste at source; 	Environmental	Construction
	 disposal of food waster and non-toxic combustible waste according to the Waste Management Plan to limit the presence of food attractants; 	Design Feature Monitoring	Operation
	 providing contained areas for lunch and coffee breaks with waste containers for food waste; 	wontoning	
	 clearly identifying all food waste containers and those for which food waste is not permitted; and 		
-	 store food waste in an isolated area and incinerate quickly. 		





Table 1.III.1-1: Summary of Commitments Made by Fortune Minerals Limited in the NICO Project Developer's Assessment Report (continued)

Section	Commitment Description	Commitmer Type	t Project Phase
18.II.4 - Monitoring Section 18	Fortune's WEMP for the NICO Project includes:		
	recording the presence of all wildlife within and around the NICO Project footprint;		
	mitigate hazards to wildlife within the NICO Project site;	Monitoring	Construction Operation
	identify non-compliance with Waste Management Plan; and		operation
	continually improve waste management practices to limit the potential for risks to wildlife.		
18.II.5 - Reporting and Adaptive Management	If negative effects to wildlife are detected at the NICO Project, Fortune will review the situation and consider the use the following options:		
	increase monitoring effort;	Monitoring	Construction
	implement new monitoring programs to further understand the effects; or	Monitoring	Operation
	implement additional mitigation to reduce the effects.		

AEMP = Aquatic Effects Monitoring Program; CDF = Co-Disposal Facility; C&R = Closure and Reclamation; DAR = Developer's Assessment Report; EA = Environmental Assessment; ETF = Effluent Treatment Facility; Fortune = Fortune Minerals Limited; IBA = Impact Benefit Agreements; INAC = Indian and Northern Affairs Canada; NPAR = NICO Project Access Road; NSMA = North Slave Métis Alliance; SCP = Seepage Collection Pond; STP = Sewage Treatment Plant; WEMP = Wildlife Effects Monitoring Program



