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1.0 INTRODUCTION

Fortune Minerals Limited (Fortune) proposes to develop a new underground and open pit cobalt, gold, copper, and bismuth mine and processing plant, herein referred to as the NICO Cobalt-Gold-Copper-Bismuth Project (NICO Project). It is located approximately 160 kilometres (km) northwest of Yellowknife in the Northwest Territories (NWT) and approximately 10 km east of Hislop Lake at a latitude of 63°33' North and a longitude of 116°45' West. This section of the Developer's Assessment Report (DAR) provides introductory information requested by Terms of Reference (TOR), issued on 30 November 2009 by the Mackenzie Valley Review Board (MVRB 2009a) and provided in Appendix 1.I.

As requested in the TOR, a conformity table (also called concordance table) listing all of the items in the TOR and the corresponding locations of the responses within the DAR is provided in Appendix 1.II. All commitments, including mitigation measures proposed by the developer, are summarized in Appendix 1.III for ease of reference.

1.1 Developer

Fortune was incorporated in Ontario in 1988 and became a publicly traded reporting issuer in 1989. Fortune's initial focus was exploring for precious and base metal deposits in the NWT. In 1992, Fortune expanded its project base to include exploration and development of industrial mineral projects in Ontario by purchasing 30 percent (%) ownership of Formosa Environmental Aggregates Ltd. At the same time, Fortune began to evaluate a number of other mineral exploration opportunities in various Canadian and international jurisdictions.

1.1.1 Project Ownership

In 1992, a director of Fortune staked the NICO 1 and 2 claims. Fortune became interested in this property because of the potential for iron oxide, copper, and gold deposits in the area and because the NICO Project property had a known cobalt-bismuth-gold occurrence. Fortune acquired its initial interest in the NICO Project in 1994, and by 1995 became the 100% owner of an expanded property comprised of the NICO Project 1 to 12 claims. To fund exploration of the NICO Project, a joint venture was established between Fortune and Maple Leaf Terminals (now Candou Industries Inc) in 1996. Fortune acted as the operator and owned an 80% participating interest, Candou Industries Inc. owned the remaining interest. Surface geology and geophysical programs conducted in 1995 identified gold-cobalt-bismuth-copper mineralization. Drilling in 1996 confirmed that potentially commercial mineralization was extensive and extended to depth.

1.1.2 History in Canada

Concurrent with work on the NICO Project, Fortune staked properties to cover other prospective mineral occurrences in the area. An option agreement was entered into with Noranda Inc. whereby Fortune's wholly owned subsidiary, Fortune Minerals NWT Inc., could earn a 50% interest in the nearby Sue-Dianne copper-silver-gold deposit. Following the earn-in period, Noranda elected not to participate in subsequent work programs and was diluted to a net smelter return royalty.

As work progressed at the NICO Project and the Sue-Dianne deposit, Fortune received considerable capital market interest in Fortune. The common shares were split on a 3-for-1 basis and listed for trading on the Toronto Stock Exchange on 31 October 1997.





In 2002, Fortune incorporated Fortune Coal Limited to acquire a 100% interest in the Mount Klappan anthracite coal project in northwest British Columbia from Conoco Canada Resources Limited (now Conoco Philips). Fortune has been advancing the development of Mount Klappan concurrently with the NICO Project.

In 2004, Fortune together with Federal White Cement Ltd., won a request for proposal to acquire the Ridley Coal Terminal at Prince Rupert, British Columbia from the Government of Canada. Northwest Bulk Terminals Inc. was incorporated to complete this transaction and Fortune owned a 25% equity interest. This request for proposal was subsequently cancelled in 2006 and the transaction did not proceed.

In 2005, Fortune entered into an agreement to purchase the mill, and other buildings, surface facilities, spare parts and inventory from the Golden Giant mine at Hemlo, Ontario from Newmont Canada Ltd. and Mindecom Industrial Constructors Limited. These assets were purchased to re-locate certain equipment to reduce capital costs at the NICO Project. Between 2006 and 2010, the buildings and equipment at the Hemlo mine were disassembled or demolished. Valuable equipment was salvaged and placed in storage pending receipt of permits for the NICO Project; surplus metals and equipment were sold to offset the demolition costs.

Fortune completed a positive definitive feasibility study for the NICO Project in 2007. Fortune again became the sole owner of the NICO Project because Candou declined to participate in subsequent work programs. In 2007, Fortune purchased Candou Industries Inc. remaining 9.2% minority interest. As part of this transaction, Fortune transferred its 30% minority interest in Formosa Environmental Aggregates Ltd. to Federal White Cement Ltd., which owned the 70% controlling interest and had common ownership with Candou.

In November 2008, Fortune submitted an application to permit the NICO Project in the NWT. In July 2009, prior to receipt of the TOR, a decision was made to re-locate the downstream hydrometallurgical portions of the NICO Project processing to southern Canada to mitigate capital cost escalation and to conduct the power intensive part of the process in a jurisdiction with lower cost electricity available. In November 2009, a site near Langham, Saskatchewan was selected for the plant location and Fortune entered into an agreement to purchase these lands through a wholly-owned subsidiary, Fortune Minerals Saskatchewan Inc.

Fortune continues to be traded on the Toronto Stock Exchange under the symbol "FT" and has three wholly owned subsidiaries, Fortune Coal Limited, Fortune Minerals NWT Inc., and Fortune Minerals Saskatchewan Inc.

1.1.3 Environmental Performance Record

A summary of Fortune's permit history and environmental performance record during exploration and mine development is provided in Appendix 1.IV. Fortune has committed to conduct activities in an open and transparent manner, control risks to the environment, and apply adaptive management principles (Appendix 1.III). Fortune's environmental policy is outlined in Section 1.1.4.

Fortune received its first Water License (W2006L2-0002) in 2005, this license will expire in 2012. Fortune has been granted various Land Use Permits for the NICO Project from 1996 extending into 2014 (Appendix 1.IV). During that time, Land Use Inspectors have made various recommendations and notes that Fortune has strived to comply with or resolve. For transparency, these are outlined in Appendix 1.IV.

Environmental incidences reported by Fortune between 1996 and 2011 are as follows:

15 April 1998 Fortune reported a diesel spill to the Spill Fuel Lines;





- 9 June 2006 Fortune reported the leak of mine water from the settling pond to the Spills Line; and
- 28 April 2010 Fortune reported a spill of diesel fuel from a drum that fell from its cribbing to the Spills Line.

1.1.4 Environmental Policies

1.1.4.1 Environmental Policy

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 seeks to continuously improve its environmental performance by establishing comprehensive environmental management programs to ensure: environmental effects are being adequately addressed, controls are in place to verify compliance with policies and procedures, environmental activities are supported by adequate resources, and plans are in place to protect the environment for future generations. To manage its business interests, Fortune will:

- 1) comply with all environmental laws and regulations and in absence of regulation, apply relevant best management practices;
- 2) establish and maintain clearly defined environmental management programs to guide its operations from exploration to final reclamation;
- 3) verify that its directors, officers, and employees understand and adhere to its environmental management programs;
- 4) provide its managers and supervisors at each operation with the authority and resources necessary to carry out applicable environmental management programs;
- 5) develop an adaptive management system that will periodically review environmental management programs as scientific knowledge and stakeholder expectations evolve;
- openly communicate and work with government, indigenous peoples, employees, business partners, suppliers, and local communities to develop mutual understanding of environmental issues and awareness that may affect Fortune;
- 7) minimize and mitigate its environmental impacts and support environmental enhancement programs of common benefit;
- 8) continuously review environmental achievements and available technologies to seek and implement methods for further improvement;
- regularly review environmental response plans to verify compliance with the corporate policy and applicable regulations. Identify revisions or improvements to current practices in order to minimize environmental impacts; and
- 10) allocate sufficient resources to meet Fortunes's environmental goals.

1.1.4.2 Health and Safety Policy

Fortune recognizes that a strong health and safety culture contributes to long-term shareholder value and that all occupational injuries and illnesses are preventable. High health and safety performance is both a core value and





a common objective of Fortune's leadership and staff. Fortune's goal is to achieve a workplace free of recognized hazards, occupational injuries, and illness.

Fortune's management is committed to preserving the health and safety of employees, client's employees, and any other personnel that interact with Fortune's site, plant, or office operations.

Fortune expects employees to be committed to safety and to demonstrate their commitment on a daily basis through their actions and involvement in safety programs and initiatives, and by strictly adhering to rules, regulations and procedures.

Fortune will foster a culture conducive to reporting unsafe acts and conditions so these may be identified and negated before injuries occur.

Fortune has developed and maintains site-specific, comprehensive safety programs for each of it's projects and offices. Fortune emphasizes proper implementation of programs and expects all employees to participate. Fortune promotes proactive safety programs and initiatives.

Fortune expects safety professionals, management and supervision to be passionate about safety, and to lead by example.

Fortune is committed to safety because Fortune's ethics dictate that the people should leave work each day unharmed and injuries in the workplace are unacceptable. Fortune is committed to safety; it is the right way to work.

This Health and Safety Policy outlines Fortune's commitment to provide a safe and healthy workplace where staff is empowered and expected to comply with policy requirements. Fortune will:

- 1) comply with or exceed all health and safety laws and regulations, requirements, and industry standards applicable to our activities;
- identify and mitigate health and safety hazards arising from it's activities;
- 3) verify that employees understand that working safely is a condition of their employment and that all workers are responsible for their own health and safety as well as the health and safety of those around them;
- 4) ensure employee competency is maintained by providing staff with training, knowledge and resources to achieve health and safety excellence;
- 5) commit to continually improving safety programs by setting health and safety objectives and targets, and to measure and monitor performance through regular inspections, audits, and incident investigations. Investigations are designed to help implement and communicate appropriate corrective actions geared towards lasting improvement;
- 6) integrate health and safety into business planning and decision making;
- 7) commit to protect the health and safety of employees and the public; and
- 8) commit to always doing what is right when it comes to employee and public health and safety; if it cannot be done safely it should not be done at all.





1.1.4.3 Sustainable Development

Fortune recognizes that the protecting the environment is critical to the success of its corporate social responsibility objectives. It is Fortune's goal to demonstrate that high standards of environmental stewardship and commitment to sustainable development can be applied to its business activities.

Fortune is committed to making a positive difference in the communities in which it operates and its staff live, and recognizes that generating shareholder value must, at the same time, consider principles of sustainable development. Fortune strives to carry out its activities in a manner that reflects its values, directors, officers, employees, local communities, and societies in which it operates. To manage its business interests, Fortune 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 Fortune, its directors, officers, and employees;
- 2) observe the fundamental tenets of human rights, safety, and non-discrimination in the workplace for all Fortune employees, commit to developing their full potential, and encourage employment and business opportunities for indigenous peoples and local community members;
- consider and evaluate social, cultural, environmental, governmental, and economic factors in its exploration, development, and mining activities with priorities given to open dialogue and interaction with indigenous peoples and local community members to facilitate long-term and beneficial resource development; and
- 4) provide stakeholders with accurate, appropriate, and timely information on Fortune activities.

1.1.4.4 Community Engagement Policy

Fortune's community investment mission is to promote the health and well being of individuals and communities where they do business. Social investments treat all people and resources with integrity and respect. To decide on how sponsorship dollars are allocated, requests for funding are reviewed on a regular and consistent basis. Decisions are based on the applications alignment with the Fortune's values and commitments and an assessment of existing funding. The majority of social investment dollars are spent on education, community, and the environment. Through community investment, Fortune aspires to have a positive and meaningful impact by supporting:

- Education by participating in school-business partnerships and fundraising initiatives, providing scholarships and bursaries for university and college programs, with particular emphasis on mining, mineral processing or materials at the undergraduate and graduate levels, or programs such as apprenticeships relevant to the mining industry.
- 2) **Community** by supporting local community activities, services and programs in the arts, sports, and recreation.
- 3) **Environment** by supporting environmental research or education and providing support to programs that encourage partnerships with environmental groups engaged in compelling and related research.





As Fortune moves into the operations phase of the NICO Project, there will be a need to build human resource capacity. This will involve recruiting trainers, apprenticeship support, and participating with the Mine Training Society and other partners to ensure that northern residents have access to training opportunities.

1.1.4.5 Northern Hire Policy

Fortune will take all reasonable steps to verify that its contractors and subcontractors during construction and operation phases adopt hiring policies consistent with Fortune's commitment to hiring Northern Residents. A management review process is in place requiring all contractors and subcontractors to report on their efforts to support local communities by: participating in development programs, using locally sourced goods and services, and providing local employment. Where opportunities exist, large contracts can be unbundled to create opportunities for local contractors, subcontractors, and suppliers. One of the evaluation criteria for contractor bids will be on the basis of whether appropriate commitments to hire Northern Residents are included.

1.2 Project Overview

1.2.1 Scope of the Development

The scope of the NICO Project includes all physical works and activities required to extract, concentrate, store, and transport concentrates out of the Mackenzie Valley. The NICO Project includes the area covered by Fortune's mineral claims and mining leases, and is generally located between Lou and Burke lakes.

The scope of development for this environmental assessment does not include construction or general operation of the potential winter road realignment, herein referred to as the Tłįchǫ Road Route, through the Wek'èezhìi Settlement Area (MVRB 2009), The Tłįchǫ Road Route is not expected to be proposed, constructed, or primarily operated by Fortune. The MVRB expects that the potential realignment of the Tłįchǫ Road Route through the Wek'èezhìi Settlement Area will undergo appropriate environmental scrutiny once applications for the road have been received. Fortune does require this road to operate the NICO Project; therefore, the use of the Tłįchǫ Road Route is included in the scope of development.

1.2.2 Location

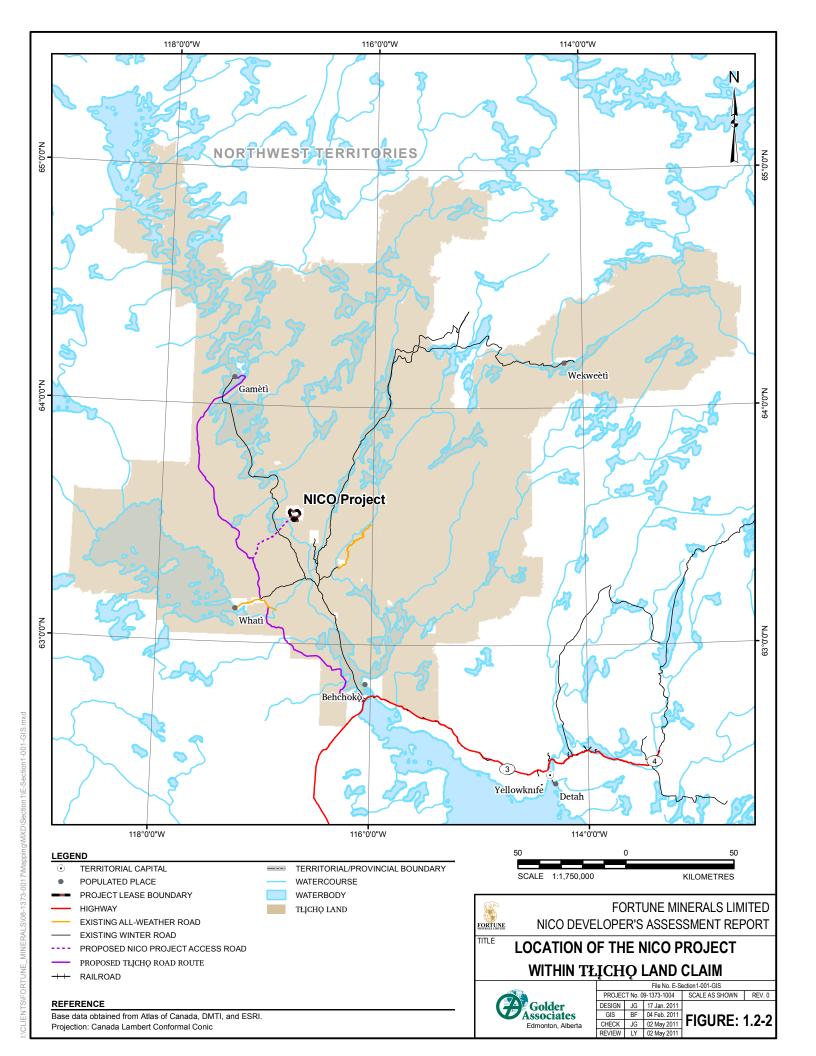
The NICO Project is located approximately 160 km northwest of Yellowknife, NWT within the Marian River drainage basin, approximately 10 km east of Hislop Lake at a latitude of 63 degrees and 33 minutes north, and a longitude of 116 degrees 45 minutes west. Figure 1.2-1 shows the location of the NICO Project site within the NWT.

The NICO Project site has rugged topography. Absolute elevations at the NICO Project site range from 150 to 350 meters above sea level (masl). The ore body is located on the northern slope of a bowl-shaped depression referred to as the "Bowl Zone". The south end of the proposed mine is located on a ridge of exposed bedrock, which slopes down towards the north end of the proposed mine in the Grid Stream depression.

With the exception of Fortune's leases, all of the land surrounding the mine is within Tłįchǫ settlement lands, owned and managed as fee-simple lands by the Tłįchǫ Dèts'ǫ Kàowo as per the Tłįchǫ Agreement (Figure 1.2-2). The Tłįchǫ settlement lands are within the Wek'èezhìi co-management lands, jointly managed with the Northwest Territory and Federal governments. Fortune's exploration leases were staked and brought to lease prior to settlement of the Tłįchǫ land claim and, as Crown Land, are administered by the Federal Government.







1.2.3 Mining and Processing

The ore bodies generally lie in 3 sub-parallel zones in a poly-metallic, IOGC type deposit, also referred to as an "Olympic Dam" type deposit. The zones range in thickness from 20 to 60 m and occur below an area 1.4 km long by 300 m wide. Both open pit and underground mining methods will be used during the life of mine. Ore will be mined from underground mine workings during the first 2 years of mining. Open pit mining will commence at the same time as underground mining and will take place in 3 stages.

Surface excavation, with heavy earth-moving machinery, will create one large, Open Pit. Rock excavated from the pit will be stored in the Co-Disposal Facility (CDF) located directly northeast of the Open Pit. The CDF will store Mine Rock co-mingled with the tailings from the Mineral Process Plant (the Plant).

The ultimate depth of the underground mine workings at termination will be approximately 170 m below ground surface at the portal elevation. At the end of operations, the Open Pit will be approximately 1450 m long by 500 m wide by 230 m deep. Typically, gold grade increases with deposit depth, therefore, the mine will process more high-grade gold during underground operations than Open Pit operations. The Open Pit will mine through the terminated underground mine workings.

The Plant consists of 4 main components:

- primary crusher and transfer tower;
- secondary and tertiary crushing building and fine ore bin;
- grinding bay; and
- Mineral Process Plant (the Plant).

Ore processing at the NICO Project will be limited to crushing, grinding, and flotation consisting of primary and secondary stages to produce bulk concentrate. The mine will process ore at a rate of 4650 metric tonnes/day for 18 years. The Plant is expected to produce 180 tonnes of bulk concentrate per day for a total of 65 000 tonnes/year for shipment via truck/rail to a processing facility in Saskatchewan. Eliminating the concentrate processing substantially reduces the amounts of chemicals, including cyanide, required to be shipped to and used at the NICO Project.

1.2.4 Mine Rock and Tailings Management

The NICO Project is expected to generate approximately 96.9 million tonnes (Mt) of Mine Rock and 30 Mt of flotation tailings during the predicted mine life. Of the total Mine Rock, 6.5 Mt is classified as sub-economic mineralized rock that may become economic. Mine Rock and tailings from the Mineral Process Plant will be contained within the CDF.

The tailings and Mine Rock CDF will be located immediately north of the ore body and within 1.5 km of the proposed Mineral Process Plant. The CDF will be developed on gently sloping ground in a sub-watershed of Nico Lake, incorporating the Grid Pond and Little Grid Pond. The configuration of the facility is developed to deposit tailings and Mine Rock within the topographic highs of the ridges surrounding the CDF. The CDF was also located and designed so it is not visible from Hislop Lake and the Marian River.





1.2.5 Water Management

Water management at the NICO Project site includes managing water that comes into contact with the mine facilities during construction, operations, and closure. Water released from the site during construction, operations or closure must meet Site-Specific Water Quality Objectives. The NICO Project Water Management Plan is detailed in Appendix 3.III.

The CDF will be used to permanently store tailings and Mine Rock, as well as housing associated water management facilities during operations. The major components of the water management system will comprise:

- Reclaim Pond on the CDF. This pond will be relocated throughout the mine's operating life as the CDF develops;
- five seepage collection ponds (SCPs) located downstream of the CDF;
- Surge Pond near the Plant;
- the Plant Site Runoff Pond;
- Sewage Treatment Plant (STP);
- Effluent Treatment Facility (ETF);
- Contingency Pond (will be constructed if required for additional settling or polishing of ETF effluent, or if the site requires additional storage capacity [Section 3.III.10.4]); and
- related water management facilities, including drainage ditches, emergency spillways, pump stations, and the reclaim water pipeline system.

The general water management concept is as follows:

- All water, which has been in contact with ore or mine waste, will be collected in one of the following: the SCPs, the Open Pit sump or the Reclaim Ponds. Collected water in these ponds will be pumped to the Surge Pond.
- Water will be pumped from the Surge Pond either to the Plant for reuse or to the ETF for treatment.
- Treated effluent from both the ETF and STP will be pumped through a diffuser directly into Peanut Lake.

At closure, pumping water out of the Open Pit will cease and the Open Pit will slowly fill with water. The rate of flooding will increase by directing CDF runoff (and seepage reporting to SCP No. 4) into the Open Pit by breaching the SCP No. 4 dam.

As a base case, it is assumed that water which accumulates in SCP Nos. 1, 2, 3, and 5, as well as the Surge Pond, will be passively treated in Wetland Treatment Systems and then released directly into Nico Lake. Overflow from the Open Pit, will be passively treated in Wetland Treatment System No. 4 and released into Peanut Lake. This is subject to demonstrating the technical performance of the Wetland Treatment Systems.

1.2.6 Site Infrastructure

The current proposed site configuration is shown in Figure 1.2-3. The site topography is illustrated in Figure 1.2-4. Proposed on-site infrastructure includes the following:





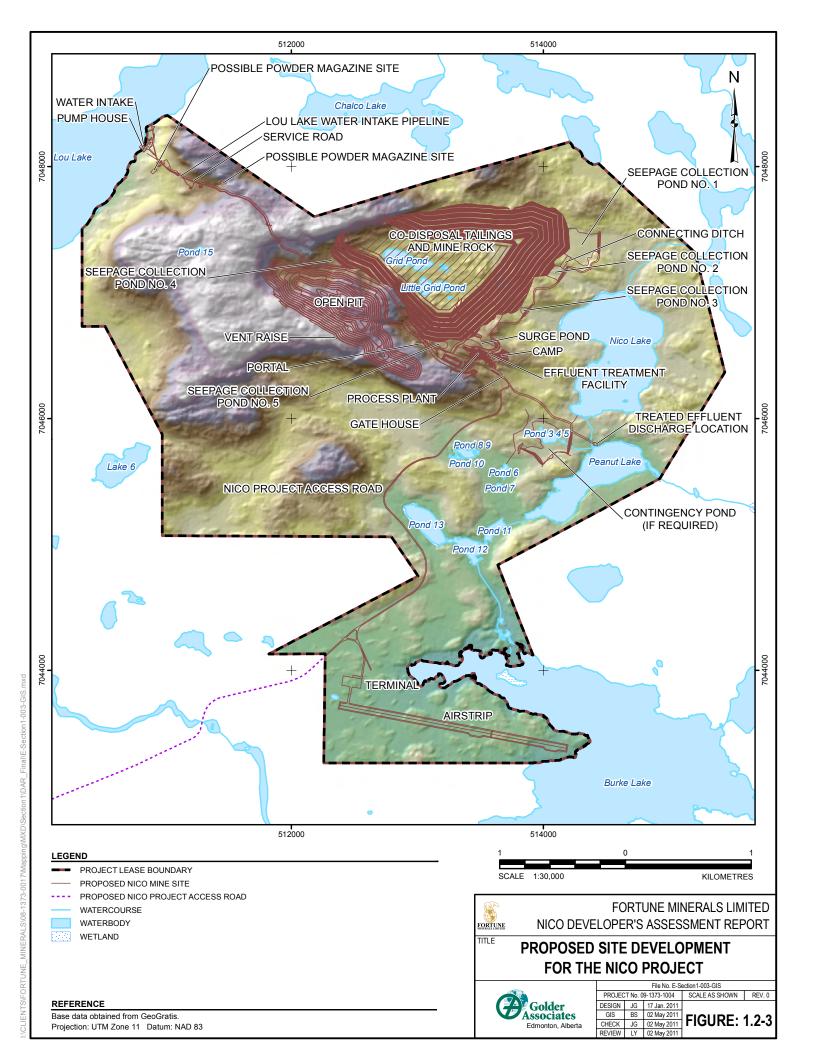
- mine site with open pit and underground operations;
- tailings and mine rock management area(s) (presented as a single CDF);
- Mineral Process Plant;
- Effluent Treatment Facility, with discharge into Peanut Lake through a diffuser;
- Sewage Treatment Plant;
- drainage controls;
- fuel and chemical storage facilities;
- Materials Sorting facility
- Airstrip;
- Landfarm;
- Explosives storage area;
- roads within the mine site and NICO Project Access Route (NPAR) with access to site via the proposed Tłjcho Road Route;
- fresh water intake on Lou Lake.

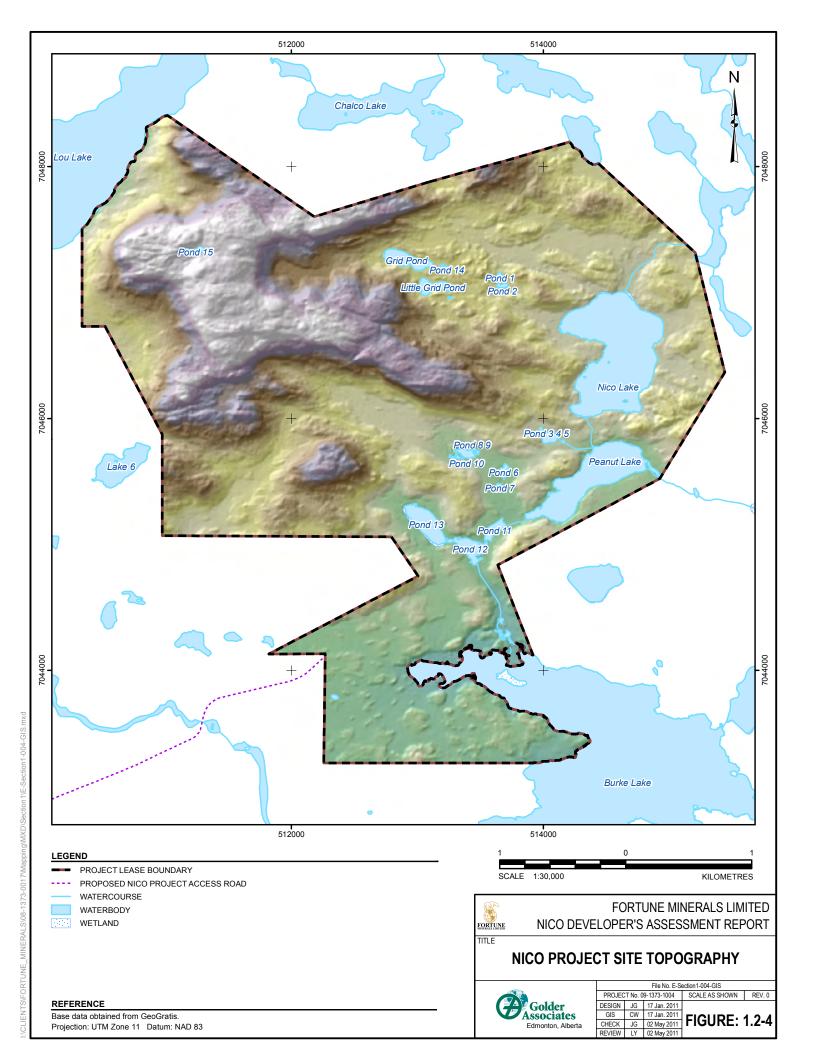
The general layout of the site was based on the following criteria:

- compact footprint for minimal land disturbance and maximum site operations efficiency;
- compact building sizes and layout for maximum energy efficiency;
- efficient facility access for personnel and vehicles during construction and operations;
- re-use of existing equipment salvaged from Fortune's decommissionedGolden Giant process plant at Hemlo, Ontario;
- energy efficiency through heat reclaimed from the power plant;
- set back of the camp from the plant site to reduce noise and capture views of Nico and Burke lakes for camp residents;
- establishment of the Plant site and camp 400 metres outside of the Open Pit blast radius; and
- minimal impact of winter road truck traffic around the site.









The NICO Project includes an all-weather transportation corridor into the NICO Project, via the NPAR, and use of the proposed Tłįchǫ Road Route to be built and maintained outside of Fortune. As the final route of the proposed Tłįchǫ Road Route was unknown at the time of submission, Fortune has assumed that the start of the NPAR would be located approximately 19 km north along the proposed and recommended 146.6 km routing. This route isreferred to as Alignment D and is the former Lupin Mine winter road alignment from the community of Whatì, (DOT/KAVIK-AXYS Inc. 2008). Access to Highway 3 would be via the NPAR to the proposed Tłįchǫ Road Route. The NPAR will be approximately 27 km long.

1.2.7 Proposed Schedule

Once Fortune has obtained the necessary environmental assessment approval, permits, and licences, the majority of construction will take approximately 12 months to complete. The construction period will be followed by an 18 year operational period during which ore will be mined and processed. Where possible, progressive decommissioning and reclamation of the NICO Project components will occur over the course of the NICO project's operational life. Closure will occur within 2 years following the end of operations. Most of the site infrastructure will be removed during that time. The final closure condition will not be reached until approximately 120 years after closure, which is the time required for the Open Pit to fill with water and begin a small discharge.

For the purposes of this submission, the schedule does not have a start date. Fortune will not initiate construction of the Nico Project until it receives confirmation that the Tłįchǫ Road Route will be built and a schedule for construction has been prepared.

1.3 Regulatory Process

1.3.1 Environmental Impact Review Process

The NICO Project is regulated by the Wek'èezhìi Land and Water Board (WLWB) under the Mackenzie Valley Resource Management Act (MVRMA). The MVRMA implements provisions of land claim agreements and establishes co-management boards as institutions of public government. The Tłįchǫ Government and the WLWB regulate the use of settlement and Crown land and water in their respective settlement areas.

For developments that may have effects that extend beyond the Mackenzie Valley, the WLWB regulates the use of land and water within Tłįchǫ territory. If a proposed development has potential to cause a significant adverse effect on the environment, or if it is likely to cause public concern, the development can be referred to the MVRB.

The MVRB is established under the authority of the MVRMA to review the potential environmental effects of developments proposed within the Mackenzie Valley area of the NWT. The Canadian Environmental Assessment Act (CEAA) applies only to the Wood Buffalo National Park and the Inuvialuit Settlement Area, both of which are outside the NICO Project boundaries.

There are 3 stages in the environmental assessment process in the Mackenzie Valley. The MVRB provides the following description of the stages:

1) Preliminary Screening

All proposed developments that require a license, permit, or other authorization must apply and go through a Preliminary Screening. A land and water board or other regulating authority administers this process. A Preliminary Screening is a quick review of a proposed development's application to decide if the development might have significant adverse impacts on the environment, or might cause public concern. If so, the application





is referred to the second stage – Environmental Assessment. If not, then the application can be sent to the regulator for permitting and licensing.

2) Environmental Assessment

Only a small number of proposed developments must go through an Environmental Assessment. The MVRB conducts Environmental Assessments. This stage is a more thorough study of a proposed development's application to decide if the development is likely to have significant adverse impacts on the environment, or likely to cause public concern.

Four possible decisions can be made by the MVRB:

- Approve project;
- Approve project with mitigation measures and/or monitoring conditions;
- 3) Reject project; or
- 4) Refer project to Environmental Impact Review (EIR) (only occurs if the MVRP decides impacts or public concern cannot be mitigated).

3) Environmental Impact Review

An EIR follows an environmental assessment when the MVRB deems a more comprehensive examination of a proposed development is needed. The review is conducted by an independent panel, which may consist of both MVRB members and non-MVRB members. All members of the panel are appointed by the MVRB. The EIR provides a more focussed study of the issues raised during the environmental assessment (MVRB 2009b).

1.3.2 NICO Project and the Impact Assessment Process

Fortune submitted applications for a Type A Land Use Permit (W2008D0016) and a Type A Water License (W2008L2-0004) to the WLWB on 5 November 2008. The WLWB then sent the applications to interested parties and regulators for review in January 2009. The WLWB initiated a Preliminary Screening and Indian and Northern Affairs Canada (INAC) referred the applications to the MVRB for an Environmental Assessment (EA) on 27 February 2009, pursuant to Section 126(2)(a) of the MVRMA The MVRB notified Fortune of the decision on 2 March 2009. Proof of community engagement for the Type A Water License (W2008L2-0004) was submitted to the WLWB on 21 January 2009.

Community scoping sessions were held in Yellowknife (20 April 2009), Whatì (27 April 2009), Behchokò (4 May 2009), Gamètì (7 May 2009), and Wekweetì (2 and 3 November 2009). The draft of Reference and work plan for the Environmental Assessment of Fortune Minerals Ltd. NICO Cobalt-Gold-Bismuth-Copper Project (TOR) were issued on 15 September 2009. MVRB (2009a) developed the draft TOR based on the information gathered, and public interest demonstrated, at the community scoping sessions and from comments provided by regulators, community governments and stakeholders. The final TOR was issued on 30 November 2009. The TOR provide direction for Fortune to organize existing information into a stand-alone DAR. The DAR will be used to inform interested parties about the development during the analytical phase of the environmental assessment.





1.3.3 Regulatory Licenses, Agreements, Permits, Authorizations, and Land Leases

The NICO Project involves a number of distinct undertakings and activities requiring licenses, permits, authorizations, or approvals ("licenses and permits") from a variety of federal, territorial, and co-management agencies. Table 1.3-1 provides a preliminary list of potential licenses and permits that may be required.

Table 1.3-1: Potential Project Licenses, Permits, Authorizations, and Approvals

Authorization, Permit, License, Approval	Legislation	Agency	Activity					
Planning, Design, and Implementation of Environmental Baseline Studies for the Environmental Impact Statement and Environmental Monitoring Studies								
Archaeological Research Permit	NWT Archaeological Resources Act	Prince of Wales Northern Heritage Centre, Department of Education, Culture and Employment, GNWT	annually as needed for archaeological research during any phase that research is deemed necessary					
Wildlife Research Permit	NWT Wildlife Act	Department of Environment and Natural Resources, GNWT	permit will be needed long- term for each phase of Project life for a wildlife monitoring plan permits are issued annually					
Scientific Research Permit	NWT Research Act	Aurora Research Institute	as needed for aquatic and wildlife effects monitoring plans permits are issued annually					
Fisheries Research License	Fisheries Act	Fisheries and Oceans Canada	as needed for aquatic and monitoring plans permits are issued annually					
Construction/Operation/Closure Phase								
Land Lease License of Occupation	Territorial Lands Act and Regulations Real Property Act	Indian and Northern Affairs Canada	long-term land lease needed for all phases of the Project					
Mineral Lease	Territorial Lands Act Canada Mining Regulations	Mineral and Petroleum Resources Directorate, Indian and Northern Affairs Canada	long-term mine lease needed for all phases of the Project initially issued for 21 years; renewable for a further 21 years					
Class A Water License	Mackenzie Valley Resource Management Act Northwest Territories Waters Act Northwest Territories Waters Regulations	Wek'eezhii Land and Water Board	long-term license needed for all phases of the Project for water use and discharge					
Class A Land Use Permit	Mackenzie Valley Resource Management Act Mackenzie Valley Land Use Regulations	Wek'eezhii Land and Water Board	Land-based activities (all- season road; camps, mine and associated infrastructure; tailings management area) for all phases of the Project					





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Table 1.3-1: Potential Project Licenses, Permits, Authorizations, and Approvals (continued)

Authorization, Permit, License, Approval	Legislation	Agency	Activity
Operations and Safety Plan Approval	Mine Health Safety Act (Territorial) Mine Health and Safety Regulations (Territorial)	Chief Inspector of Mines, Workers' Safety and Compensation Commission, GNWT	long-term approval needed for construction and operation phases of the Project
Water Intake Authorization	Fisheries Act	Fisheries and Oceans Canada, Fish Habitat Management	long-term authorization for water use needed for all phases of the Project until closure is complete
Electrical Permit	Electrical Protection Act	GNWT Public Works and Services	Electrical or electronic installation
Timber Permit	NWT Forest Management Act Mackenzie Valley Resource Management Act	GNWT Environment and Natural Resources; Wek'eezhii Land and Water Board	Permit for cutting of timber
Quarry Permit	Mackenzie Valley Resource Management Act	Indian and Northern Affairs Canada	long-term permit needed for all phases of the mine permit to be issued annually
Registration of fuel storage tanks	Canadian Environmental Protection Act	Environment Canada with cooperation from Indian and Northern Affairs Canada	authorization needed for on- site fuel storage while fuel storage tanks are in place
Fisheries Authorization or Letter of Advice	Fisheries Act	Fisheries and Oceans Canada, Fish Habitat Management	at each stage of renewal of Water License or Land Use Permit if fish habitat is harmfully altered, disrupted, destroyed or deleterious substances deposited.
Approval for Constructing Works in a Navigable Water	Navigable Waters Protection Act	Transport Canada	long-term authorization needed for all phases of the Project for structures across or over navigable waterbodies
Explosive Storage, Explosive Handling, Magazine Permits Permit to Store Detonators	Explosives Act and Regulations Mine Health and Safety Regulations (Territorial)	Department of Natural Resources Canada Chief Inspector of Mines, Workers' Safety and Compensation Commission, GNWT	storage and use of explosives at laydown and work areas needed for all phases of the Project where explosives will be on-site
Approval to Transport Dangerous Goods	Transportation of Dangerous Goods Act	Transport Canada	Transportation of dangerous goods by highway, barge and/or air subject to the TDG Regulations for all phases of the Project





1.4 Report Organization

The DAR for the NICO Project has been organized into 20 sections, prepared on the basis of the TOR issued by the MVRB in November 2009 (MVRB 2009). The TOR were prepared by MVRB to address all relevant issues and concerns expressed by stakeholders, agencies and regulatory authorities.

Sections 1 to 6 of the DAR provide the necessary information to assess the effects. To present the required material in an organized and readable format, the DAR sections move from introductory or background information, through a detailed development description, into the existing environment and detailed effects assessments, and conclude with clear description of the predicted impacts of the NICO Project. DAR sections 7 to 19 are the Key Lines of Inquiry (KLOI) and Subjects of Note (SON) outlined in the TOR. Section 20 is the summary and conclusion of the DAR. References for each section are included within that section.

Section 1 provides an overview of the NICO Project and Fortune's corporate profile. Section 2 provides the NICO Project alternatives, including alternative mining methods, water management, closure and reclamation and transportation. Section 3 describes the proposed development in detail. Section 4 outlines Fortune's approach to engage communities and record of engagement attempts and issues raised. Section 5 outlines the process used to collect traditional knowledge and how traditional knowledge is used in the DAR. Section 6 outlines the overall assessment approach, including pathway analysis, valued components, spatial and temporal boundaries, and assessment methods

The issues cover a broad range of topics with some requiring greater effort in effects assessment than others. The TOR were structured with a hierarchy of assessment requirements, which the MVRB (2009a) described as follows:

- Key Lines of Inquiry the topics of greatest concern that require the most attention during the environmental assessment and the most rigorous analyses in the DAR. These are designated as KLOIs to ensure a comprehensive analysis of the issues most likely to cause significant environmental impacts or significant public concern.
- Subjects of Note All other valued components or issues identified in this document that require examination in the DAR are treated as SONs. These issues do not have the same priority or expected level of detail as KLOIs, but are nonetheless issues that require serious consideration and substantive analysis.

The KLOIs evaluated in the NICO Project DAR are as follows:

- Water Quality (Section 7);
- Caribou and Caribou Habitat (Section 8); and
- Closure and Reclamation (Section 9).

The SONs evaluated in the NICO Project DAR are as follows:

- Air Quality (Section 10);
- Water Quantity (Section 11);
- Fish and Aquatic Habitat (Section 12);





- Soils and Terrain (Section 13);
- Vegetation (Section 14);
- Wildlife (Section 15);
- Human Environment (Section 16);
- Accidents and Malfunctions (Section 17);
- Biophysical Environment Monitoring and Management Plans(Section 18); and
- Effects of the Environment on the NICO Project (Section 19).

Each KLOI and SON is contained in a main section. In consideration of the environment, appendices, excluding monitoring and management plans, are contained in digital format on disk with each DAR. Fortune will make available to requesting parties a print copy of any appendix. Management and monitoring plans will be supplied in print form.

While the DAR is primarily organized according to the TOR, in some cases, the structure has been reorganized based on information available, logical sequencing, and document flow. Key changes between the TOR and the organization of information in this DAR are as follows:

- The list and discussion of the regulatory permits, licenses, authorizations, approvals, and land tenure agreements is presented in Section 1 with the discussion of the MVRB regulatory process section instead of with the development description as outlined in the TOR.
- The existing environment summary is presented in each applicable KLOI and SON.
- Cumulative effects have been included in individual KLOIs or SONs, as appropriate.
- Section 17 presents a comprehensive summary of the Accidents and Malfunctions Plan.
- The SONs have been organized in a sequence that allows the reader to follow the flow from physical to biological assessments.

1.5 References

KAVIK-AXYS Inc. 2008. Multi-level mapping and route analysis Tłįcho transportation corridor. Route Identification and Evaluation. Prepared for Department of Transporation, Government of the NWT, Yellowknife, NWT.

MVRB (Mackenzie Valley Review Board). 2009a. Terms of Reference for the Environmental Assessment of Fortune Minerals Ltd. NICO Cobalt-Gold-Bismuth-Copper Project EA 0809-004. Yellowknife, NWT.

MVRB. 2009b. About the Review Board. Available at: http://www.reviewboard.ca/about. Accessed December 2009.



