

TABLE 3-1: FINAL COMMITMENTS TABLE

CONSULTATION	FULFILLMENT
Continue to engage First Nations throughout the EA process.	Complete
Operate and participate in a Technical Advisory Committee (TAC) which will meet in the region three times annually to review and discuss mine operations and monitoring results, and other issues of mutual interest in the region.	Licence condition
Welcome NBDB, LKFN, other First Nation, and Government representation on the TAC.	
Appropriate collaborative monitoring initiatives with First Nations, Parks Canada and other regulatory agencies will be supported.	TAC oversight
The Nahanni Butte community information representative position will be continued during operations.	
CULTURE	
If possible heritage/cultural resources are found, they will be preserved and the authorities notified.	Permit condition
Deter and monitor un-authorized use of the access road and hunting.	TAC oversight
Employ an NBDB member as an environmental monitor.	
Involve NBDB members in spill response training and inform the Band of any spills.	
CZN will conduct a supplementary Archaeological Impact Assessment for the proposed road re-alignment from the Liard River near Nahanni Butte to Grainger Gap. The survey will occur after the road alignment has been confirmed more accurately.	Permit condition
SOCIO-ECONOMICS	
Impact Benefit Agreements will be negotiated with the Nahanni Butte Dene Band and the Liidlil Kue First Nation.	Complete
Negotiate a Socio-Economic Agreement with the GNWT	
A hire-first policy for qualified local (Nahanni Butte) residents, then Dehcho residents, then northern residents, will be adopted.	SAC oversight
Services and supplies will be sourced locally and across the north, provided these are competitive.	
Employment of Dehcho residents and social impacts will be monitored via annual IBA reports, and details of mine employment, training and contracts given out will be provided. Such reports will also be the basis for reporting to regulators.	
Employees will be offered a variety of mine related training courses, including skills training in their area of employment and in safety. The Mine scholarship program will continue.	
The Mine will work with communities and its leaders to develop and implement strategies to limit negative health outcomes, such as drug and alcohol abuse.	
The Mine will continue to be active in Study Area communities through sponsorship programs that will improve life for communities and those not benefiting from the Project directly.	

TABLE 3-1: FINAL COMMITMENTS TABLE

Applicants for work at the mine will be notified that should they be employed, they will have to make appropriate arrangements for child care in their absence.	SAC oversight
Contractors and subcontractors will be required to sign an Employment Contract and Code of Conduct regarding adhering to policies such as northern employment criteria, which will be part of selection evaluation criteria. Information on potential employees will be passed on to contractors, and Study Area communities will be notified of construction and hiring timelines.	
The Mine's socio-economic Adaptive Management System will consist of: a <i>Monitoring System</i> consisting principally of a year-long process of collecting and analysing data and trends regarding the outcomes from participation in the Project and more general socio-economic progress of the Study Area; and, a <i>Response System</i> consisting of a formal session to communicate results and receive input from representatives of the affected communities on areas where changes could improve outcomes and productivity.	
After fulfilling obligations to IBA's and the Nahendeh Aboriginal Economic Council, the Mine will advertise its needs in regional newspapers and continue participation in regional NWT trade shows to communicate the opportunities associated with the project. A database of NWT qualified businesses related to various services and supplies will be maintained.	
An annual operations report will be produced to provide the public with information regarding the production schedule at the Prairie Creek Mine, its employment record, and planned activities for the upcoming year. This report will inform Study Area, Deh Cho and NWT residents and regulators, and will include information on employment and business procurement.	
CZN will identify jobs for which formal entry level educational requirements will be adjusted for Dene job applicants. For greater certainty,[sic] but subject to applicable law, CZN commits to requiring Dene to have a minimum Grade 10 for all entry level positions at the project, and will, from time to time, adjust formal entry level educational requirements for vacant positions in order to improve the acceptability of potential Inuit job applicants for these positions.	
Where appropriate, CZN will consider ability, skills and experience as an equivalent to formal qualifications as identified in job descriptions.	
Dene employees will not be disciplined or terminated due to their inability to speak the English language, but may be transferred to a job requiring less knowledge of the English language or to a training program to suit them to another job. Such transfer will be at the discretion of CZN.	
Dene who do not possess knowledge of the English language, either written or verbal, will be given reasonable opportunities to qualify for jobs where lack of knowledge of the English language does not compromise the safety of the employee, safety of others or job performance.	

TABLE 3-1: FINAL COMMITMENTS TABLE

CZN expects to provide several summer positions for various responsibilities. The areas of work could relate to general labourers, office assistance or help with annual events held in neighbouring communities. These annual positions could be posted at the mine site, regional CZN offices, and advertised in local newspapers. Priority will be given to relatives of mine staff from the IBA communities.	SAC oversight
CZN will encourage and provide opportunities for advancement and promotion to employees.	
CZN will ensure that its internal posting system for hiring personnel for the project will include posting at the project and in Nahanni Butte.	
CZN will develop recruitment and hiring policies and procedures that will encourage Dene employment at the project.	
It is the goal of CZN to enhance positive benefits and eliminate or at least reduce the impacts of negative effects. It will do this through a combination of its “hire first” program, offering a comprehensive benefits package to employees, making the Prairie Creek Mine site hospitable through numerous activities, programs and services, employ a community information representative to help with communications between employees and mine management, and to remain active participants in Study Area community events.	
The focus is primarily on the participation of labour and business from the Study Area communities. However, opportunities will exist for any resident or business in the NWT.	
Once CZN has fulfilled its commitments with its IBA holders, the company will promote the direct employment of NWT residents outside the Study Area promoting available employment positions with advertising in regional newspapers, and postings with NWT employment agencies. Some of these agencies would include MTS and the employment coordinators with various First Nation Bands in NWT. The company will consider a pick-up point in Yellowknife if employee numbers warrant it and it is economically justified.	
Much of the participation during construction will be local. This is particularly true for employment.	
... CZN has undertaken to employ NBDB members as environmental monitors at the mine and for the access road. CZN is also looking to NBDB members first for the operation of checkpoints on the road to manage traffic and the possible use of the road by individuals not on mine business.	
CZN expects to follow the hiring preferences negotiated with its IBA holders. The order of priority CZN has been using for hiring applicants with similar qualifications can be defined as: 1. Members of the Nahanni Butte Dene Band 2. Members of the Liidlii Kue First Nation Band 3. Dene descendants within the Dehcho Region 4. Residence within the Northwest Territories 5. Others.	

TABLE 3-1: FINAL COMMITMENTS TABLE

As part of our responsibility to the Northwest Territory <i>[sic]</i> , we are strongly committed to employing and training people who are native to this area and/or are permanent residents. To achieve this, travel assistance will be provided for employees traveling from designated points of hire.	SAC oversight
Should circumstances change in such a manner that different rotation schedules become more feasible, such options will be discussed with the mine's workforce.	
Work rotations at the Prairie Creek operation are based on three week turnarounds (i.e., three weeks working followed by three weeks off).	
Personnel that are not area residents will be flown-in to site on charter flights originating from 1 or 2 locations, such as Fort Nelson, Edmonton, Yellowknife or Vancouver. Employees will make their own way to these locations for pick-up. Personnel from local communities will be flown in on charter flights from Nahanni Butte, Fort Liard or Fort Simpson. NWT residents beyond these communities will make their own travel arrangements to these pick-up points.	
CZN will be making commitments to apprentice positions with its IBA holders. The company expects to have several apprentice positions available with the project although priority will be given to CZN's IBA holders.	
CZN will employ Dene apprentices, if available and if there are qualified tradesmen on site to supervise an apprentice.	
CZN will also endeavor to carry out relevant training programs that are offered through cooperation with other agencies in the Territory to support regional education and build up a further educated Territorial workforce.	
For the Study Area community as a whole, regarding additional investments in education, CZN will: <ul style="list-style-type: none"> • Sponsor students attending higher education through a scholarship program. • Work with the NWT Mine Training Society and Aurora College to provide education and training opportunities. • Work with Study Area schools to provide details of its operations, its future labour and supply needs, and opportunities for students. • Work with Study Area communities and businesses to improve participation and productivity. • Remain very active in the communities through investments, sponsorships, promotions, and attendance at community events. 	
CZN wishes to provide opportunities for participation by Dene in the development of the project, and that to do so training will be required to position Dene to take advantage of business and employment opportunities associated with the project.	
Through its Impact and Benefit Agreement holders and the Deh Cho First Nation, CZN is looking to invest in education and training specific to the needs identified by the Dehcho residents. Emphasis is on skills that are applicable to many job descriptions and not necessarily specific to mining.	

TABLE 3-1: FINAL COMMITMENTS TABLE

Canadian Zinc will promote higher learning through a scholarship program, sponsor training in conjunction with the mine training society, take an active role in the schools and communities, and sponsor visits by school staff to site to help them understand better the environment and the possibilities for their students.	SAC oversight
Where an employee is required to have specific skills to operate equipment in the course of their duties, training will be provided.	
The company is also committed to providing mentoring programs at the mine, ongoing school workshop presentations at local schools, and annual scholarships to promote the abilities of future generations within the Dehcho Region.	
A general overview of CZN's Aboriginal and NWT procurement strategy is outlined below. CZN will focus on a general Northern procurement policy by adhering to the following principals: i. Wherever practical, construction projects will be split into phases or segments so that small northern contractors and suppliers can have the opportunity to bid. ii. Wherever practical, goods contracts will be tendered by grouping so that northern contractors and suppliers have the opportunity to bid and compete. iii. Whenever practical, contracts for the supply of goods will be tendered in a manner which provides opportunities for northern contractors or suppliers.	
Canadian Zinc is committed to working with the community and business leaders to maximize the benefits from the Project. As a part of this commitment, Canadian Zinc will offer valuable guidance in areas where it has particular expertise such as management, industrial development, and organisation.	
It is CZN's intent to provide IBA holders advance notice on all contracts and procurement opportunities. The specific timeframes are still in IBA negotiation. Further to this commitment, CZN expects to advertise sourcing needs in local and regional newspapers in the NWT, and notify local businesses of the project's requirements.	
The focus is primarily on the participation of labour and business from the Study Area communities however opportunities will exist for any resident or business in the NWT.	
CZN recognizes that businesses which maximize Dene content should, consistent with the terms of this schedule, be given preference in the provision of commercial services for the project.	
CZN will apply its local and NWT procurement policies during the reclamation phase.	
... Canadian Zinc will discuss the importance of local hires with Aboriginal development corporations during and after IBA negotiations and make northern employment a criterion for evaluating proposals.	

TABLE 3-1: FINAL COMMITMENTS TABLE

<p>CZN will focus on procurement of Aboriginal services with the following policy: "Aboriginal Business" means a business owned by one or more of the Participating First Nations, directly or through their respective development corporations, or a Member or Members of the Participating First Nations. The Aboriginal Business must comply with all the legal requirements to carry on business in the Dehcho region and must be certified by the relevant Participating First Nations and meet one of the following criteria:</p> <p>i. Is a corporation or limited company with at least 51 percent of the company's voting shares beneficially owned by a Participating First Nation, a Participating First Nation development limited partnership or a Participating First Nation Member or Members;</p> <p>ii. Is a cooperative with at least 51 percent of the cooperative's voting shares beneficially owned by one or more Participating First Nations, a Participating First Nation development limited partnership or Participating First Nation Members;</p> <p>iii. Is a sole proprietorship, the proprietor of which is or is owned by one or more of the Participating First Nations, Participating First Nations development limited partnership or Participating First Nations Members;</p> <p>or,</p> <p>iv. Is a partnership, the majority interest in which is owned by one or more of the Participating First Nations, Participating First Nations development limited partnership or Participating First Nations Members, or in which the majority of benefits under the partnership agreement accrue to the Participating First Nations or Participating First Nations Member(s).</p>	SAC oversight
<p>CZN will emphasize local procurement by its contractors and will make this a valued component in how bids are evaluated. Businesses outside the Study Area will be encouraged to participate, and CZN will extend to them the same opportunities given to Study Area businesses should those companies be unable to fill certain contracts. CZN would prefer to offer contracts to NWT-based companies that can provide goods and services at a competitive price and meet local sub-contracting criteria.</p>	
<p>In order to ensure that its contractors and subcontractors honour and adhere to all commitments made, CZN will ensure, through written contracts, that all such parties are aware and comply with all of the terms and conditions associated with such permits that are necessary for operating the Mine.</p>	
<p>Much of the construction activities will be completed by contractors. These contractors will be encouraged to hire from within the Study Area communities. To facilitate this local participation, Canadian Zinc will</p> <ul style="list-style-type: none">• notify the Study Area communities of the construction schedule in advance of the activities,• set out a schedule of when the contractors will be hiring,• provide the names of past employees to the contractors,• provide the names of contractors and their contact information to the communities, and• pass applications from local labour to contractors.	

TABLE 3-1: FINAL COMMITMENTS TABLE

To improve the efficiency of CZN's employment policy, the company will coordinate information of potential employees to contractors, notify Study Area communities of construction timelines and timelines for hiring, and pass along applications from local workers to contractors.	SAC oversight
As part of their ongoing employment, all employees will take part in cross-cultural training to assist with the development of positive working relationships at the mine.	
As the project progresses, work will be required to study if and how the transfer of wealth is taking place.	
Where necessary, as determined by CZN, signs, safety, regulations and job advertisements shall be translated.	
... regardless of their family situation, Canadian Zinc employees will have access to a comprehensive human resources package that includes programs to help reduce the negative aspects of rotational work. Camp life will include recreational activities, religious services, and access to the Internet. The camp itself is being designed such that each employee will have their own room. Programs will be offered throughout the year such as personal financial planning and those associated with seasonal and religious holidays. Counselling services will be available as a part of the overall employee compensation package. In addition, traditional Aboriginal events and activities will be planned and country foods will be served when available.	
Canadian Zinc will continue to be active in the Study Area communities through sponsorship programs that will improve community life and that <i>[sic]</i> for those not benefiting from the Project directly.	
Canadian Zinc will have guidelines that outline the circumstances under which employees can return home prior to the completion of their rotation. The company will also have a leniency policy for new employees that will outline the circumstances under which workers need some time to adjust to work life and camp life. Canadian Zinc will also sponsor community events that help improve the quality of life for those not participating directing <i>[sic]</i> in mine employment and those who are on their three-weeks off.	
CZN will provide an option for all its employees to participate in a comprehensive benefits plan coverage, which includes dental, medical, AD&D, life insurance (both short- and long-term disability coverage), as well as an employee assistance program.	
CZN will provide at its cost regular but limited opportunities for Dene employees to communicate with immediate family in their home communities using satellite or other phone systems.	
every employee will be encouraged to participate in supplementary orientation seminars upon arrival at the site for the first time. Seminars will include, but may not be limited to, guidance on personal financial management, and review of employee benefits packages.	

TABLE 3-1: FINAL COMMITMENTS TABLE

Canadian Zinc is committed to working closely with its employees, their families and communities to find solutions to challenges as they occur. The community information representative will be responsible for assisting employees and Canadian Zinc management communicate <i>[sic]</i> with one another when issues arise.	SAC oversight
Life skills training will be made available on an as need <i>[sic]</i> basis through the Training Department. Life skills training programs provide employee assistance in coping with new situations from camp life, long distance commuting to basic financial planning that is needed as a result of increased income.	
The employment assistance program (EAP) is designed to assist employees and their immediate family members with problems that may affect their well-being and/or their ability to perform their jobs. The EAP will be operated by a third-party professional counselling service (accessible in the first instance by phone) and services will be available to the CZN employees and their immediate family (spouse, partner and dependents).	
The Human Resources Management Plan outlines the details related to alcohol and drug usage during an employee's time at Prairie Creek. In addition, the company will engage with the Study Area communities and encourage cooperation with government and non-government officials on a strategy that might limit the severity of this impact and ensure these people receive the help they need.	
<p>The on-site measures CZN would pursue to protect workers from the spread of communicable diseases include the following:</p> <ul style="list-style-type: none"> • Having trained medical personnel to identify communicable diseases • Providing advice regarding personal hygiene. • Designating potential areas to isolate infected workers if required • Pre-screening employment candidates with medical check-ups • Requesting employees to be up-to-date with their vaccinations • Post the contact number for the Chief of Public Health • Discuss possible outbreaks of STIs at Health & Safety meetings • Provide educational materials in the project's library 	
<p>Highlighting CZN's Adaptive Management System will be:</p> <ul style="list-style-type: none"> • A <i>Monitoring System</i> consisting principally of a year-long process of collecting and analysing data and trends regarding the outcomes from participation in the Project and more general socio-economic progress of the Study Area. • A <i>Response System</i> consisting of a formal session to communicate results and receive input from representatives of the affected communities on areas where changes could improve outcomes and productivity. 	
CZN has committed to altering its programs where possible when existing ones are ineffective or problematic.	
Canadian Zinc is committed to monitoring and reporting the socio-economic progress of the Study Area communities during the operation of its mine.	

TABLE 3-1: FINAL COMMITMENTS TABLE

The annual report will include information on the socio-economic performance of the Study Area. These data will be gathered from secondary sources, including the NWT Bureau of Statistics and Statistics Canada. This information will be combined with knowledge gathered by company officials including community information officers working in the Study Area and communicating with active employees, their families, and other community members to determine the overall socio-economic changes taking place.	SAC oversight
The Company will generate an annual report on production, employment, procurement and socio-economic trends. It will be the principal communication tool that informs the public of the results from the Company's monitoring system. This monitoring includes information gathered from employees and their communities by the community information officers. Other company officials will remain active in the communities through their participation in sponsorships, promotions and investments. Information gathered "on-the-ground" will be combined with the technical approach used in gathering and reporting operations' data and socio-economic statistics.	
<p>CZN will produce an annual report on its operations. It will provide the public with information regarding the production schedule at the Prairie Creek Mine, its employment record, and planned activities for the upcoming year. This report will serve as CZN's submission to inform Study Area, Deh Cho and NWT residents and regulators. The report will include information on employment and business procurement. The statistics reported will include:</p> <ul style="list-style-type: none"> • total workforce, new hires, terminations, and total labour income, • training programs, number of participants, and apprenticeships, • gross value of operation expenditures, a list of procurement contracts, and participating Aboriginal and NWT businesses, • road access—the details of this information such as volume of commercial and non-commercial traffic depends on the final decision regarding road ownership and public access, • community activities, investments and sponsorships, and • a schedule of upcoming procurement opportunities and operational expenditures. 	
Where the disclosure of information does not compromise confidentiality, data will be separated by ethnicity and geography; that is, Aboriginal versus non-Aboriginal, and Study Area communities versus the rest of the NWT and non-NWT. CZN will include all Status, non-Status, Métis, and Inuit as Aboriginal for the purpose of reporting ethnicity. NWT Residency will be defined as living in the territory.	
Education relating to commodity prices, market fluctuations, supply/demand and operational costs will be made available to the public.	
Significant monitoring of operations and the environment will occur during and after the Mine's life. CZN expects individuals from local communities to be involved in this, preferably as employees. CZN undertakes to share the monitoring results.	TAC oversight

TABLE 3-1: FINAL COMMITMENTS TABLE

<p>[As noted in Table 9-1, The CZN Monitoring and Management System includes:</p> <ul style="list-style-type: none"> • Impact and Benefit Agreement Reporting: Detailed reporting to communities with Impact and Benefit Agreements. The contents of these reports are subject to ongoing negotiations. • Employment Reporting: Annual reporting on total workforce, new hires, terminations, length of employment, labour income. • Procurement Reporting: Annual reporting on total expenditures for goods and services, list of goods and services required, upcoming requirements, total spending on First Nation businesses and NWT businesses. • Communication Strategy: Working with the communities through the IBA negotiations, establish a communication strategy with each community. • Annual Socio-Economic Report: Detailed report on mining activities, and the economic, social, cultural and socio-economic performance on the Study area. 	SAC oversight
FISH	
Any habitat losses will be replaced to the satisfaction of Fisheries and Oceans Canada (DFO).	Fisheries Act
DFO's <i>Operational Statements</i> for creek crossings, including span structures and ice bridges/snow-fills, will be adopted. Physical footprints will not be introduced within the high water mark of crossings, other than snow and ice.	Permit conditions
Disturbance of stream banks and riparian areas at stream crossings will be minimized. Stream banks will be protected as necessary, with the possible use of ice and/or matting. A stable road bed will be constructed adjacent to creeks and runoff control will be provided. Revegetation of riparian areas will be promoted.	Sediment and Erosion Control Plan
Temporary crossing structures and snow-fills will be removed at break-up.	Inspector oversight
Best management practice sediment controls will be adopted at the Mine and along the access road.	Sediment and Erosion Control Plan
A sediment and erosion control plan will be developed for construction and operation of the access road as a condition of a new road LUP.	Permit condition
The 'DFO Protocol for Winter Water Withdrawal from Ice-Covered Waterbodies in the NWT' will be adopted for water supply from lakes for road construction. Appropriate data will be provided to DFO for approval before extraction occurs. Assessment data for creeks will be collected and DFO consulted for approval before extracting water from creeks. Expected water sources are the Mine well, Mosquito Lake and the Liard River. A short spur road to Mosquito Lake already exists and will be utilized. Other lakes will be quantified and water extracted based on the protocol. The main water use is expected to be for road bed construction. Creek crossings will be primarily by snow-fill. Clear span structures will be considered if conditions vary from those expected.	Permit condition and Fisheries Act

TABLE 3-1: FINAL COMMITMENTS TABLE

Disruption of the only known spawning location in the area (bull trout in Funeral Creek) during the spawning period (mid-August) will be avoided.	TAC oversight
The site policy of no fishing and any other unnecessary disturbance of the aquatic environment will be continued.	Licence condition
Sources of aggregate will not be situated in river beds or within the high water mark of alluvial fans. No additional access roads and/or crossings will be required to access aggregate sources.	TAC oversight
To reclaim the Funeral Creek road after Mine closure, coarse material or organic material will be placed adjacent to the creek to prevent sediment discharge until vegetation has established. Any channels flowing over the re-contoured road area will be armoured. Silt fence will be used where necessary to control sediment immediately after re-contouring. Materials will be placed on the road bed and not the bed of Funeral Creek	Final CRP
For exfiltration trench construction, measures for isolation of the work area and protection of the creek will be further developed after a positive EA outcome and during detailed design, to the satisfaction of DFO. A construction water management plan and spill contingency plan would also be developed.	Fisheries Act
A detailed habitat assessment of the proposed location of the exfiltration trench will be conducted in 2011. Design modifications and/or the incorporation of additional elements will be considered as part of detailed design to avoid habitat loss. If it is determined that habitat loss is unavoidable, a suitable habitat compensation plan will be developed, also during detailed design.	
On mine closure, the approach to decommissioning of the exfiltration trench will be determined in consultation with DFO.	CRP
WILDLIFE	
Wildlife Mitigation and Monitoring and Flight Impact Management Plans	
The draft Wildlife Mitigation and Monitoring Plan (WMMP) will be updated during the permitting process. The plan will be considered a 'living' document, and further changes will be considered as necessary during operations, such changes being considered and discussed in the forum of the Technical Advisory Committee.	Permit condition and TAC oversight
For caribou, wood bison, grizzly bear, wolverine, peregrine falcon, short-eared owl, horned grebe, rusty blackbird, olive-sided flycatcher, and common nighthawk, any mortality directly relating to the operation of the mine site or access road will trigger a review of mitigation strategies.	WMMP
The Nahanni Butte Dene Band will be consulted in the development of a wildlife management plan.	Permitting process
CZN welcomes NBDB, LKFN, other First Nation and Government representation on the Technical Advisory Committee (TAC).	TAC oversight

TABLE 3-1: FINAL COMMITMENTS TABLE

Flight Impact Management Plan	
The Flight Impact Management Plan (FIMP) will be reviewed and updated.	Permitting process
Flight paths to and from the mine will be considered according to the recommended guidelines for flying in caribou and sheep country, where feasible and within topographic and safety constraints.	FIMP
Wildlife Sighting /Monitoring / Reporting	
Wildlife sightings in proximity to the Mine site and access road will be recorded in a wildlife sightings log, including location, numbers observed and reactions.	WMMP
Dead wildlife encountered in proximity to the mine site and access road will be recorded and geo-referenced.	
A Dall's sheep monitoring program will be implemented to ensure that Project-related effects on sheep are minimized. A monitoring plan is described in the draft Wildlife Mitigation and Monitoring Plan, and this is considered to be a response to Undertaking 23 from the Oct. 7, 2010 Technical Meeting.	
Appropriate collaborative monitoring initiatives with First Nations, Parks Canada and other regulatory agencies will be supported.	
All relevant observations of wildlife (particularly of Dall's sheep, caribou, grey wolf, wolverine and grizzly bear) will be reported to mine environmental staff.	
All vehicles will be equipped with two-way radios. Wildlife sightings along the access road will be geo-referenced and reported to road supervisors.	
A radio call-in procedure will be implemented so that observations of caribou along the access road can immediately be relayed to the Road Operations Supervisor.	
A procedure will be implemented so that caribou observations made by aircraft pilots during transport of crews and materials will be reported to the Wildlife Monitor.	
Wildlife monitors will conduct ground surveillance during the initial mine start up and production period.	
Wildlife Monitors will conduct ground-based surveys of the access road (during winter operation), mine infrastructure sites, and the airstrip to assess caribou presence and identify caribou aggregations in the Project area.	
Summer maintenance work on the all season road will be voluntarily restricted to the period July-September. Wildlife monitors will check for nesting birds before work commences.	
If a nesting bird is found on site and eggs are present, monitoring will be conducted and efforts will be made to avoid the area. Any raptor nesting activity observed within 1.5 km of the Project will be reported to GNWT ENR.	
Any raptor nesting activity observed within 1.5 km of the Project will be reported to GNWT-ENR and Parks Canada.	

TABLE 3-1: FINAL COMMITMENTS TABLE

Measures aimed at reducing the number of birds that use the water storage pond (WSP) will be implemented.	WMMP
Wildlife Monitors will contribute to a detailed quarterly report of wildlife observations and incidents that occurred during the monitoring period. Reports will be submitted to First Nations, GNWT ENR, Environment Canada and Parks Canada.	
Bears	
Guidelines found in the “Safety in Grizzly and Black Bear Country” document will be followed to prevent and mitigate bear-human interactions.	WMMP
The appropriate regulatory agencies (<i>e.g.</i> , GNWT ENR and Parks Canada) will be informed of any incidents with problem bears or other wildlife prior to action, unless imminent worker safety is at risk.	
Bear use of habitats near mining infrastructure (<i>e.g.</i> spring foraging by bears in disturbed areas) will be documented.	
A warning system will be developed for site workers in connection with bear sightings, as well as a structure for reporting bear-human encounters.	
Waste Handling	
An effective Waste Management Plan will be implemented, particularly as it relates to the disposal of food waste.	WMMP
Site workers will be encouraged to eat only in designated areas. Workers will be made aware as part of site orientation when they start that food, food waste and wrappings are not to be left around the site or in buildings where un-controlled entry is possible.	
All food and garbage/waste will be stored in bear-proof areas or bear-proof containers, including at the transfer facilities.	
Food waste will be collected and incinerated on a daily basis.	
All chemicals and supplies will be stored in an enclosed Warehouse structure. Small quantities will be transferred to their point of use (in the Mill or shops) as required.	
The transfer facilities will be closed, all fuel, waste and sewage removed, and free of all attractants outside of the haul season.	
Safety and Training	
On-site personnel will be educated on the applicable policies and practices contained in the Wildlife Mitigation and Monitoring Plan.	WMMP
The guidelines for responding to bear encounters (contained in the Health and Safety Plan) will be reviewed and updated.	
On-site personnel will receive basic bear awareness and safety training, including information on bear behaviour, how to avoid bear encounters, and how to respond to bears in the case of an encounter. Site environmental officers will be tasked with overseeing the program in terms of enforcement and effectiveness.	
On-site personnel will be discouraged from using areas outside of immediate work sites.	
Hunting, trapping and harvesting by site employees and contractors will be prohibited.	

TABLE 3-1: FINAL COMMITMENTS TABLE

Pets will be prohibited on site.	WMMP
Access Road	
Maximum traffic speeds for all sections of the access road will be implemented accounting for road grade, curvature, adjacent sensitivities and sight-lines. Lower maximum speeds may be posted in the vicinity of sensitive wildlife areas.	Road Operations Plan
A signage system will be employed along the access road to inform vehicle operators of vehicle/wildlife conflict areas.	
Vehicle operators will yield right-of-way to wildlife and will take all reasonable measures to avoid vehicle-wildlife incidents.	
When any SAR species is visible on the road, vehicle activity will cease until the animals have moved a safe distance away or are no longer visible.	
High snow banks along the access road will be avoided so that wildlife can avoid traffic. Failing this, lower snow banks will be left every 100 m to facilitate wildlife moving off the road surface.	
To reduce noise along the access road, the use of engine retarders will be discouraged.	
Salt will not be used on the road alignment.	
Public and Access	
Non-mine road traffic will be deterred from using the road by signage and operating a check-point and screening station near the south-eastern terminus of the access road, manned by representatives from the Nahanni Butte Dene Band.	Road Operations Plan
Unauthorized use of the access road, and evidence of land use such as hunting, fishing, camping, or firewood harvesting will be noted, deterred and reported.	
The south-eastern end of the access road will be blocked at specified locations after each hauling season with gates, berms, pits and/or boulders to discourage use.	
Non-mine vehicles, including all terrain vehicles (ATVs) and snowmobiles will be prohibited on site.	TAC oversight
OPERATIONS MANAGEMENT	
Existing Prairie Creek Mine buildings and structures were designed and constructed by Kilborn Engineering Ltd. to the National Building Code. All new facilities will be also.	Licence condition
During the detailed design phase, a deterministic hazard assessment (DHA) for the project site will be undertaken, including review of ground acceleration coefficients.	
All personnel will receive appropriate training to ensure they are fully aware of health, safety and environmental policies and practices and able to perform tasks in compliance with established policies and legislation; and to ensure employees are fully aware and trained to respond to an emergency.	HSP and EMP
Aggregates for the Mine would be sourced from the on-site quarry and possibly other local sources. Any crushing required will occur set back from the creek with a buffer for runoff.	Licence condition
Explosives for Mine operations will be exclusively emulsions or sticks.	EMP

TABLE 3-1: FINAL COMMITMENTS TABLE

Reagents currently stored on the Reagent Storage Pad south of the Mine will be consumed during operations or taken off-site for disposal.	TAC oversight
Due care and precautions will be taken during the winter transfer of sulphuric acid from tankers to storage tanks.	
All concentrates will be shipped in bags free of external concentrate dust. Any torn bags will be double-bagged, and any spillage cleaned-up completely.	Road operations plan
Water for fire suppression will be taken from the water ring main.	EMP
Drummed hazardous waste will be collected in the Waste Transfer Area for off-site disposal by a registered carrier following all applicable regulations.	SHWMP
Waste motor and lubricating oil will either be blended with diesel fuel or used for incinerator ignition.	EMMP
Existing infrastructure will be surveyed for asbestos-containing material, and any such material found will be removed and landfilled within the Waste Rock Pile footprint.	
A solid waste facility will be operated consisting of a solid waste landfill for inert material, a fenced sewage sludge landfill and a landfarm for hydrocarbon contaminated soil.	SHWMP
Heat traced pipe will carry process water and mine water to and from the Water Storage Pond. Lines will be inspected frequently, and will run along the access road and not next to Prairie Creek.	WSTDP
A spill contingency plan for the Mine and access road will be reviewed and updated. The plan will include the transport, manufacture and use of explosives and components of explosives.	Licence condition
Water treatment sludge will be combined with the backfill mix and taken underground, as will ash from the incinerator. In the unlikely event that monitoring and assessments during operations indicate that a period of water treatment needs to continue after mine closure, any sludge will be stabilized with cement and taken to a suitable disposal location. This might be a mine portal that has not been completely backfilled in order to accommodate the sludge, or part of the Waste Rock Pile before cover placement.	EMMP and CRP
Annual geotechnical inspections of major structures (Water Storage Pond, Waste Rock Pile, Flood Protection Berm), and terrain in and around them, will be undertaken.	Licence condition
The Catchment Pond will be lined with a low permeability geomembrane, and the existing culvert to Harrison Creek will be retained for emergency use only.	
The Catchment Pond discharge mechanism will include pumps on stand-by which can be activated to ensure sufficient discharge. The outfall line will have a valve or gate which can be temporarily closed, if necessary. Discharge of treated water to Prairie Creek during winter will occur via a pipeline from the WTP connected to the outlet culvert in the Catchment Pond. The pond would be isolated from the line to avoid freezing effects. There will be a safety return line from the Catchment Pond to the Water Storage Pond with installed pumps. The outfall line will have a valve or gate which can be temporarily closed, if necessary.	WSTDP

TABLE 3-1: FINAL COMMITMENTS TABLE

The following plans will be developed: Water Storage, Treatment and Discharge Monitoring and Management Plan (WSTDP); Solid and Hazardous Waste Management Plan (SHWMP); Explosives Management Plan (EMP); Aquatic Effects Monitoring Plan (AEMP).	Licence condition
Medical personnel will be on call 24/7 to provide medical, educational and counselling services..	HSP
Sub-contractors will be required to adhere to all of the Mine's commitments.	Licence condition
The backfill of flotation tailings as paste will be maximized initially by minimizing use of DMS rock, and bringing all development rock to surface. These restrictions may be relaxed later in the mine's life provided it has been definitely determined that an excess mine void will remain after closure if the backfill strategy remains static.	
All flotation tailings will ultimately be placed underground in mine openings. No flotation tailings will be placed in the WRP or left on surface after mine closure.	
ROAD	
The existing Cat and Grainger Camp sites will be reclaimed. A small tote road to Grainger Camp from the new road alignment would be built for temporary access.	Permit condition
Kledo's general approach to road construction (Appendix B) will be adopted (although CZN is not committed to use Kledo).	Road Operations Plan
The western flank of the Silent Hills contains historic failures, and permafrost may exist along the Polje alignment. These areas will be examined in more detail during the detailed design phase of the project.	Permitting process
Side hill cuts and fills will generally be avoided except where the evidence is that the ground is free of ice rich permafrost. Cut material will be used if appropriate, or used elsewhere, but not discarded downslope.	Road Operations Plan
The Polje re-alignment will include fill placement, but gaps/swales will be left so natural runoff flow directions are not significantly modified.	
Polje Creek will be spanned with a bridge structure which would remain for the duration of the Mine. The base of the deck will be at least 1 m above the normal high water mark. Abutments will be set-back from the top of bank.	Permitting process
All new road alignments will retain the organic layer as much as possible to insulate the underlying soil and limit the potential for permafrost thaw. Adequate drainage will also be provided to avoid unstable slopes.	Road Operations Plan
A level road bed will be created using dozers with shoes fitted on the bottom of the blades. This will minimize disturbance of the organic layer.	
Regarding the accumulation of debris on the existing road from upslope, the information will be used to plan the road location with respect to the toe of the slope (in active debris areas).	
A geotechnical investigation is proposed to support the final design of the access road. The investigation will focus on portions of the access route west of Km 85, specifically, the proposed polje by-pass and immediately west of Wolverine Pass.	Permitting process

TABLE 3-1: FINAL COMMITMENTS TABLE

<p>The route east of Km 85 will be visually reviewed annually before the following winter. After the first winter of road operations, drainage management at and west of Wolverine Pass will be reviewed, as will the route west of Km 85 to assess the function of cross-road drainage.</p>	<p>Road Plan Operations</p>
<p>Construction and maintenance activities will be continually overseen by supervisors who will ensure appropriate techniques are used such that sediment will not be produced during periods of thaw. This will also apply to seasonal road closure activities, including snow-fill removal.</p>	
<p>Road monitoring will occur during both construction and operation. During construction, monitoring will be daily to assess how recently constructed portions are performing, and to determine requirements for portions being constructed. During operations, monitoring would initially be daily, with a reduction in frequency as road performance becomes better defined. Drivers will report on road conditions and any areas of difficulty or requiring repair. Snow accumulations will also be monitored to assess the potential for avalanches.</p>	
<p>After the first year of construction, and following extreme rainfall events at any time, the re-alignments will be checked for areas of instability, specifically the creek crossings, areas of fill placement, and the switch-backs in the Silent Hills. Low over-flights of these areas are initially proposed to allow for inspection. If problem areas are suspected, follow-up inspections will be made by helicopter, and will include set-downs and the use of small tools (e.g. shovels) and readily transportable materials (e.g. silt fence), as necessary. More significant remedial work would be undertaken during construction in the subsequent road season.</p>	
<p>Closure activities for side hill cut areas will be formulated using the observations and experience gained during the operating period. It is envisaged that material replacement will occur in order to restore a stable natural slope and provide a suitable medium for revegetation. Measures will be incorporated into the restored slopes to maintain stable surfaces until a vegetation cover has been established</p>	<p>CRP</p>
<p>All trucks on the access road will carry spill kits, and drivers must have read the spill contingency plan and be prepared for an appropriate spill response in relation to their load. Drivers must be suitably qualified and experienced.</p>	<p>Road Plan Operations</p>
<p>All trucks will have communications, will be on alert for on-coming traffic or wildlife presence in the roadway and will be in contact with a controller.</p>	
<p>All of the vehicles and equipment using the access road will be properly maintained and free of leaks. Stationary equipment will use drip pans.</p>	
<p>Road use (including vehicle speeds and driving conditions) will be monitored by radio and inspections. A journey management system (JMS) will be used (see Appendix I of the IR2 response for details).</p>	
<p>The access road bed will be sampled before and after the seasonal haul period as a check on potential contamination from concentrate losses.</p>	

TABLE 3-1: FINAL COMMITMENTS TABLE

Haul trucks collecting the bags (from the Mine) will pass through a wheel wash before leaving the concentrate storage shed.	Road Plan	Operations
The existing Controlled Road Use Plan will be modified for access road operations to promote safety and minimize the risk of accidents.	Replaced by Road Operations Plan	
Potentially unstable areas and karst features within 200 m of the access road will be inspected at a frequency dependent on observed conditions and changes or lack thereof of those conditions.	Road Plan	Operations
Temporary crossing structures and snow-fills will be removed at break-up to avoid blockage and erosion.		
A stable road bed will be constructed adjacent to creeks and provide for runoff control and minimize the dispersal of sediment during precipitation events.		
Re-vegetation of riparian areas will be promoted to further reduce the potential for sediment dispersal.		
Chemicals will be transported and stored in approved containers.	SCP	
The Spill Contingency Plan (SCP) will address all potentially hazardous substances used at the Mine or transported along the road. The SCP will contain information that clearly states the responsible party for spill response and clean-up.		
Portable spill response equipment will be maintained no more than 50 km from any location along the road.		
The SCP will include details of spill responses for all types of ground conditions, including frozen and non-frozen ground, and with and without snow cover. Opportunities for the rapid spread of contaminants will also be considered, such as in karst areas.		
A trained spill response team will be maintained at the Mine. Operators at the Transfer Facilities will also receive appropriate spill response training. Training will include classroom study, equipment deployment instruction and spill exercises.		
Spill exercises will be undertaken in summer (initial training) and winter (final training) conditions, and in locations representing the range of environmental conditions that will exist on the road.		
CZN will endeavour to contract a bulk fuel service company located in the region, preferably close to the haul route, which has an established mobile spill response unit that would be available 24 hours a day.		
The erection of a guard rail-type barrier on the outer edge of the road from Km 11-16 will be evaluated to reduce the risk of spills along this section where the grade is steep and a tributary of Funeral Creek exists below.	Road Plan	Operations
Suitable locations for the construction of run-away lanes will be investigated for sections Km 11-16 and 19-22.		
Specific speed limits may be set for specific types of trucks and loads through sensitive sections.		
The road operations supervisor will place limits on hours of driving over a prescribed period.		

TABLE 3-1: FINAL COMMITMENTS TABLE

The road will be regularly inspected and maintained during the operating season to ensure optimal performance and minimize risks from poor road bed conditions.	Road Plan	Operations
Trucks will be required to use chains from Km 0 to Km 29.		
To respond to spills, an Incident Command System (ICS) will be used that is widely used by governments and industry (see Appendix I of the IR2 reply for details).	SCP	
A silt or other form of curtain will be stored approximately mid-point between the mine and Funeral Creek ready for deployment to reduce flow in part of Prairie Creek adjacent to a spill.		
Control points will be established at key locations, and will include material to create temporary dams, absorbents, booms, board weirs and sand bags. Control points locations will include two upstream tributaries to Funeral Creek, on Sundog Creek just above the main falls and just before the fluvial outwash plain, and downstream of the Tetcela River and Fishtrap Creek crossings.		
Spill kits will be carried on vehicles with materials appropriate for the loads (i.e. type of sorbent). Comprehensive spill kits will be maintained at the mine site, Cat Camp, the Tetcela Transfer Facility, Grainger Gap, and the Liard Transfer Facility. Custom built and stocked road trailers dedicated to spill response, containing equipment, materials and tools will be considered.		
WATER STORAGE POND		
Mine water will be pumped up to the final sump on the 880 m level, 300 m from the 870 portal. From there, the water will be pumped to the Water Storage Pond. Back-up pumps will be available at the sump to ensure continuous pumping.	WSTDP	
The existing pond will be converted into the Water Storage Pond (WSP), with remedial works to stabilize the backslope and a new synthetic liner.	Permitting process	
Repairs to the armour of the flood protection berm will continue when factors are favourable. Critical armour placement is complete. Follow-up work can be completed when circumstances permit, followed by embankment slope reconstruction.		
The crest of the WSP will be at elevation 881 m. The operating water level will be between elevations 877 m and 880 m. The dam emergency spillway will be incrementally below the 881 m crest elevation. The spillway will be located in the eastern dyke of the WSP so that in the highly unlikely event of an emergency controlled discharge, flows would report to the site surface water management system inside the flood protection berm.		
The WSP will be operated with a 1 metre freeboard which will be maintained at all times, unless a short-term emergency storage requirement occurs.	Licence condition	

TABLE 3-1: FINAL COMMITMENTS TABLE

Detailed design of WSP surface water diversion ditches will be completed after site grading plans have been prepared as part of final design. The ditches will be lined. Monitoring plans will be included. The upslope area will be graded. The frequency and magnitude of extreme events (rainfall, snowmelt) in terms of stability analysis and design of diversions will be considered further as part of detailed design.	Permitting process
WATER	
A new Mine Water Contingency Plan will be developed.	Replaced by WSTDP
Seepage from the Waste Rock Pile will be collected in a lined pond and transferred to the Water Storage Pond, as will drainage from the lined DMS rock and ore stockpiles. Pond size and emergency spillway details will be confirmed during final design.	WSTDP
The Waste Rock Pile lined seepage collection pond will be connected to the site water management system, either by pipeline or by borehole to the underground Mine workings. The pond will be sized to store 6500 m ³ with a 1 m freeboard (accommodating the 1 in 100 year storm event). The pond will have a spillway to discharge flows that exceed pond capacity. The spillway will be located to discharge the peak flows entering the pond without displacing the water already in the pond. Sediment accumulations will be monitored and removed, as necessary. The WRP will have diversions around the pile footprint to prevent runoff from outside the footprint reporting to the pile collection pond. WRP site preparation and pond construction will include oversight and approval by a qualified engineer. The operation plan will include adjacent vegetation preservation to maintain the slope cover	Permitting process
Flows in Prairie Creek will be monitored continuously, and information relayed to the control room in the Water Treatment Plant.	SNP
Further investigation of the WSP will be undertaken to determine the northern extent of the clay layer and condition of embankment clay. During construction, a quality assurance program will be implemented to ensure the intent of the design is achieved. A maintenance program for the north slope and embankments will be developed and will form part of an Operations and Maintenance Manual. A series of slope inclinometers, thermistor strings and piezometers will be installed after construction. Results will be analysed by a qualified engineer. Measures will be taken to control vegetation growth and to monitor for erosion.	Permitting process and licence condition
A 1 metre freeboard will be maintained in the Water Storage Pond, and a minimum operating level will be selected to maintain backslope stability. The water level will be closely monitored. Runoff from upslope will be diverted in lined ditches, west to Prairie Creek and east to the main camp ditch.	

TABLE 3-1: FINAL COMMITMENTS TABLE

If the dyke between the WSP and the Mine site were to fail, contaminated water could be released. The Catchment Pond outlets would be closed to contain the release. The Mill would stop operating so that process effluent is not being sent to the WSP or the treatment plant. The treatment plant would treat only Mine water and the water released from the WSP until the pond is repaired.	WSTDP
If a failure occurs upslope of the WSP that puts it out of commission, Mill operations may be stopped and all Mine water treated and discharged until the WSP is back in operation.	
Only phosphate-free detergents will be used on-site. Alum will be added to precipitate phosphates. Sewage effluent will be pumped to the Water Storage Pond. Nitrogen concentrations will be minimized by using emulsion explosives with strict explosive management practices	WSTDP and EMP
Sewage produced in outlying areas will be collected and transported to the Sewage Treatment Plant. Grey water will be treated as sewage.	WSTDP
During construction, sedimentation from the WRP will be controlled using silt fencing, erosion control blankets or other technologies, as necessary. The completed drainage channels will include erosion and sedimentation control technologies. The performance of these channels will be monitored.	Licence condition
Discharge water quality and the receiving environment's ability to absorb the discharge will be closely monitored. Metals analysis capability will be available on site.	WSTDP and SNP
During operations, data on actual and potential metal release from the Mine and WRP will be collected and assessed to further develop mitigation and monitoring plans for closure.	CRP
The Mine water treatment plant will be initially sized to treat 134 L/sec, but can be readily expanded to double the capacity (268 L/sec).	WSTDP
The WTP will include a clarifier to remove suspended matter and ensure discharge has low TSS.	Permitting process
The water treatment plants will have double pumping systems (one operating and one on stand-by). Stand-by power would operate both plants if power is lost from the main power plant	WSTDP
Treated water quality will be monitored closely to ensure discharge quality meets specified criteria. If water quality is unacceptable, discharge would be stopped by re-circulating the treated water inside the plant, then either the treatment capacity will be increased, or inflows from outside the plant will be stopped and flows will be diverted to the Water Storage Pond.	
If discharge concentrations (to Prairie Creek) are higher than predicted, or monitoring detects changes which were not predicted, the response will depend on the parameters considered to be causing the problems, and when they occur. A review of water treatment schedule and performance will be undertaken in conjunction with toxicity studies in order to define the source of the variance from predictions.	

TABLE 3-1: FINAL COMMITMENTS TABLE

An AEMP will be designed and implemented for the project in accordance with AANDC's "Guidelines for Designing and Implementing Aquatic Effects Monitoring Programs for Development Projects in the Northwest Territories - 2007."	Licence condition
Once water quality objectives (WQO's) for Prairie Creek have been determined and agreed to, the Mine will manage the project so that they are met consistently, unless un-related circumstances occur (such as unforeseen natural events) that prevent the Mine from doing so.	SNP
The Mine will manage the project so that the WQO's are met at the assessment boundary, unless other circumstances occur beyond the Mine's control.	
The WQO's will be considered applicable for all mechanisms of effluent discharge from the project (e.g. one or two exfiltration pipes, etc.).	Licence condition
The discharge of treated process water will not occur during the months of February and March.	
Treated process water discharge during other winter months will be less than in other seasons, and will be managed to ensure a minimum dilution ratio with creek water flow is maintained.	
Effluent that is acutely toxic will not be discharged.	MMER
Effluent that does not meet the conditions of the Water Licence (e.g. EQC's) will not be discharged.	Licence condition
Additional 'active water storage will be provided, either by modifications to the existing WSP or by building a second WSP.	
If modifications to the existing WSP are proposed and include raising the dykes, the dyke adjacent to Prairie Creek would be raised by upstream methods to avoid any further encroachment on the floodplain.	Permitting process and Fisheries Act
If a second WSP is built, it will be double-lined, and set back at least 30 m from the normal high water mark of Prairie Creek. Water conveyed to and from the pond will be via pipelines equipped with pressure sensors, and a pressure drop would trigger the shut off of pumps delivering the water. The pipelines will be routed over lined ditches or other containment structures so that any spills will be contained.	Permitting process and WSTDp
The treatment of process water will be improved by either enhancing the currently proposed system, or adopting a precipitation-ion exchange system.	Permitting process
A consequence of initially maximizing the backfill of flotation tailings is a possibility of more DMS rock reporting to the WRP. Geochemical studies indicate changes in WRP leachate should not be significant. However, as a precaution, the DMS rock will be segregated from development rock and placed in the upslope portions of the WRP so that additional control measures to limit seepage can be implemented on mine closure, if required.	Licence condition

TABLE 3-1: FINAL COMMITMENTS TABLE

The majority of seepage from the WRP is expected to report to a seepage collection pond at the toe of the pile. The remainder is expected to percolate downwards and be captured in the cone of groundwater depression created by mine dewatering. There is a small risk that some subsurface seepage may evade the seepage collection pond and discharge to Harrison Creek. To mitigate this risk, a shallow groundwater interception system will be installed consisting of a cut-off trench along the toe of the WRP. The depth of the trench and other details will be confirmed as part of site investigations leading to detailed WRP design.	Permitting process
AIR	
The existing power generating units will be replaced with fuel efficient, compact generators with lower emissions. The existing exhaust stacks will be replaced with a single stack.	Contaminant Loading Management Plan
A new, low emission incinerator will be brought in to incinerate Camp waste daily. The waste stream will not include plastics or sewage sludge.	
Mitigation and adaptive management strategies and plans will be developed to minimize emissions related to fugitive dust and incineration.	
Air quality monitoring will likely include sampling for TSP, PM10 and PM2.5 at a minimum of one location on the project boundary (perhaps adjacent to the creek). Passive monitoring stations for SO2 and NO2 would likely be co-located with the particulate monitoring station(s). A dust-fall monitoring program on the project boundary and adjacent (off-site) to significant material handling locations would also be proposed. Assessment of program requirements will be conducted in consultation with EC/ENR	
MINE CLOSURE	
Hydrogeological and geochemical data will be collected routinely during operations in order to update predictions of the behaviour of the backfill and groundwater and surface water quality after mine closure. Post-closure monitoring will include wells that monitor the mine 'pool', wells that monitor groundwater quality along the flow-path of metal release in bedrock and in the alluvial aquifers (HCAA and PCAA), and stations on Prairie Creek. Trigger levels linked to specified response actions will be set for selected monitoring wells to give an 'early warning' of a developing issue. Further study will be required during the operating period to better quantify the flow-path and attenuation mechanisms.	CRP
All flotation tailings will ultimately be placed underground as a paste backfill. No mine waste will remain on the Prairie Creek floodplain after closure.	Licence condition
All sediment and tailings residues remaining in the WSP after closure will be recovered and included in underground backfill.	CRP

TABLE 3-1: FINAL COMMITMENTS TABLE

A natural cover will be placed on the WRP to limit infiltration and seepage and promote revegetation. The final composition of the cover will be based on WRP monitoring during operations. The water management ditches and other water control facilities will be upgraded, re-constructed or decommissioned as necessary. The seepage collection pond will be decommissioned once testing of runoff meets criteria. The Waste Rock Pile (WRP) final slope angle, cover design and runoff diversion structures will be designed to be stable in perpetuity	Contaminant Loading Management Plan
Revegetation of the Mine site will rely on natural invasion to avoid introducing exotic species. Observations of natural revegetation around the mine site and along unused portions of the access road will be recorded to justify the adoption of this approach to reclaim disturbed areas.	
Parks Canada wishes to initiate a study prior to road operations concerning techniques that might be used to improve revegetation and reclamation. Collaboration from the Mine was requested and agreed to in the form of accommodation/meals and assistance with transport.	In progress
For the first 3 years after closure, monitoring and inspections will occur monthly over the period March to November. Annual reports will be produced. In the following 5 years, monitoring and inspections will occur bi-monthly from May to September. In the final 5 years, monitoring and inspections will occur once a year in July (post-freshet). However, post-closure monitoring will continue until conditions have reached an equilibrium and stabilized, and it has been conclusively determined that no further closure activities are required.	CRP
Updates to the closure and reclamation plan, including updated water quality predictions, are proposed for the time of Water Licence renewal, normally every 5 years.	