MING COPPER-GOLD MINE

CONSTRUCTION AND OPERATIONS ACTIVITIES

Environmental Protection Plan

Rambler Metals and Mining Canada Ltd.
309 Highway 410
P.O Box 291
Baie Verte, NL A0K 1B0

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1.0 INTRODUCTION

The Ming Copper-Gold Mine (the Project) is being developed by Rambler Metals and Mining Canada Ltd. (Rambler), a wholly owned subsidiary of Rambler Metals and Mining PLC, a public company formed in April 2004, and listed on the London's AIM and Toronto's TSX-V stock exchanges.

The project involves the reactivation of the Ming Mine site, near Baie Verte in Newfoundland. Rambler has completed a detailed exploration program (from surface and underground from former mine workings) on the Ming Property to evaluate the feasibility of re-establishing a mining operation at the former Ming Mine where historically, 2.1 million tonnes of ore at 3.5 percent copper and 0.07 oz/tonnes gold were extracted until closure in 1982.

Rambler commissioned and released a NI43-101 Resource Estimate in 2009 which reported a massive sulphide resource of 2.02 million tonnes of ore, grading 2.04 percent copper and 2.36 grams per tonne gold. This equates to approximately a 7 year life-of-mine at a production rate of 850 tonnes per day. The proposed underground mine will be an extension of existing underground workings using longhole mining and post and pillar room mining methods.

Evaluation of ore milling options showed that purchase of the Nugget Pond Mill was the preferred milling option and in 2009 Rambler purchased the Nugget Pond Mill from Crew Gold (Canada) Inc. The Mill boasts a fully operational gold hydrometallurgical facility with a fully permitted Tailing Management Facility (TMF) and sufficient tailings capacity for Rambler's Ming Mine project. The Nugget Pond site has operated since 1997 and has an impeccable operating record with respect to environmental compliance.

To produce copper concentrate from the Ming Mine ore at the Nugget Pond Mill, Rambler will construct a copper floatation circuit to supplement the existing gold milling process. The Nugget Pond Mill's existing crushing and grinding circuit will be utilized and the tailings effluent from the process will be discharged to the existing TMF. Evaluation and testing of process effluent and tailings solids indicates that the existing TMF has sufficient storage capacity to permanently store all tailings materials for the Project and will not require physical or chemical treatment changes to adequately treat the mill effluent prior to release to the environment.

To ship the copper concentrate to market, Rambler is working towards a lease agreement with the Town of South Brook, NL to lease the existing port facility at Goodyear's Cove, approximately 1 km northwest of the town. The existing wharf will serve to load concentrate storage ships using a mobile conveyor. A concentrate storage building and associated infrastructure will be constructed at the site to store copper concentrate for shipment approximately 4 to 5 times per year. Site development will be contained to existing disturbed areas

and access to the site will be via an existing 200 m gravel road which connects directly to the Trans Canada Highway (TCH). Refer to Figure 1-1 for the Project locations.

The proposed Project development is scheduled to commence in 2010 pending receipt of the necessary regulatory permits and approvals. Highlights of the project schedule include:

- The overall life of mine is expected to be 7 years based on the current production schedule and currently predicted mining conditions and resources;
- Equipment procurement to commence in the second and third quarters of 2010;
- Detailed engineering and site construction will commence in the third quarter of 2010 and run through to the first quarter of 2011;
- Mine pre-production to commence in the third quarter of 2010 with mining to start in second quarter of 2011; and
- Mill commissioning to commence within the first quarter of 2010 with full production commencing within the second quarter of 2011.

As a condition of the Environmental Assessment approval, this Environmental Protection Plan (EPP) was prepared for the construction and operations activities at the three properties associated with the Project.

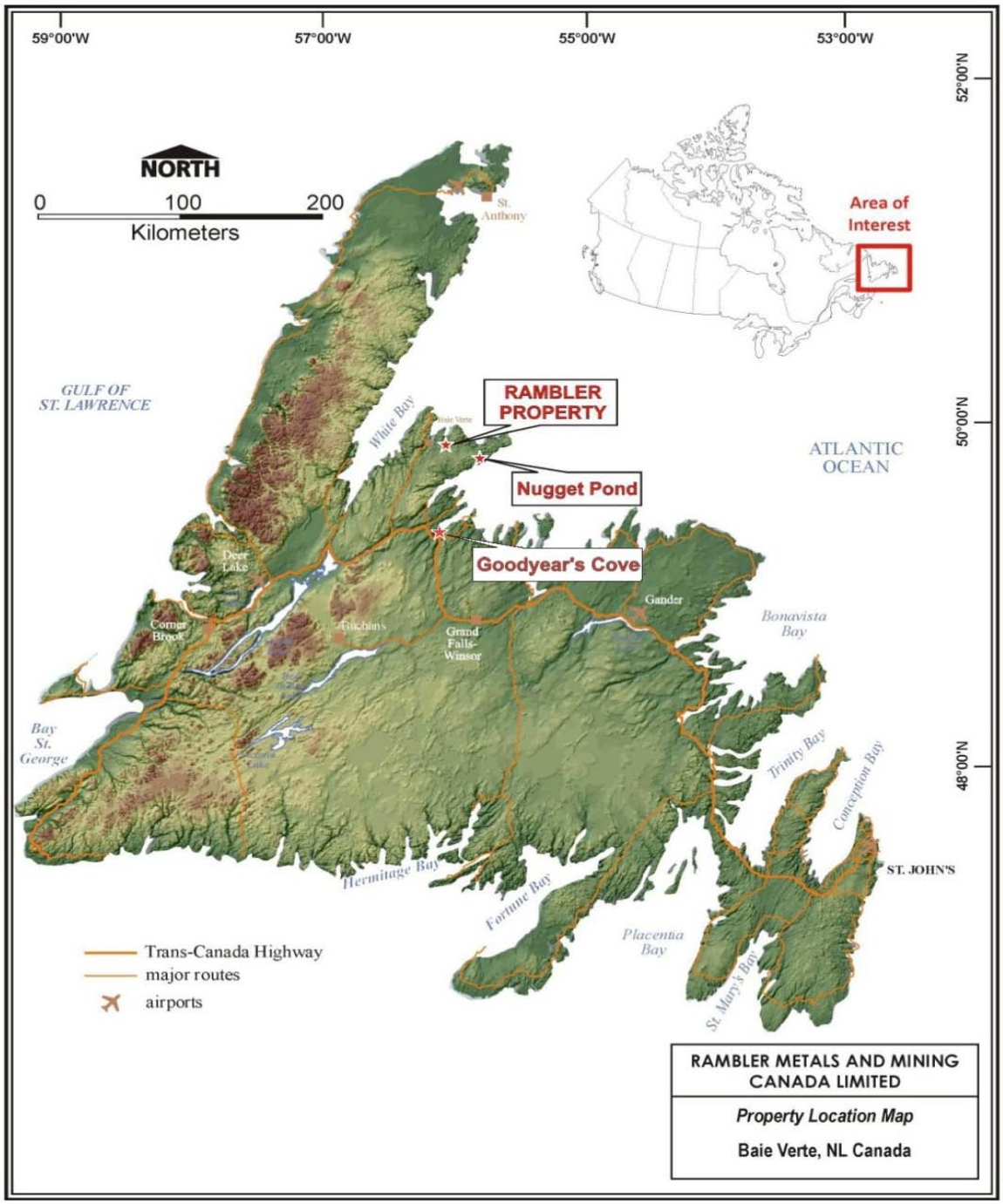

Figure 1-1 Project Location

1.1 Purpose of the Environmental Protection Plan

This EPP outlines practical procedures required for all personnel (i.e., Rambler employees, contractors and suppliers) to reduce or eliminate potential adverse environmental effects associated with the construction and operations work across the Project sites. The objectives of the EPP also include:

- Confirm commitments to reduce environmental effects;
- Document environmental concerns and appropriate protection measures;
- Provide a reference document for personnel when planning and/or conducting specific activities (the "reference document" is this EPP);
- Provide direction for accidental events;
- Communicate changes in the program through the EPP revision process;
- Provide a reference to and instructions for personnel to understand applicable legal and other requirements;
- Include a quick reference for both personnel and regulators to monitor compliance and recommend improvements; and
- Provide direction at the corporate level for ensuring commitments made in policy statements are implemented and monitored.

Any deviation from the procedures and commitments outlined in the EPP must be discussed with, and approved by Rambler and/or Newfoundland and Labrador Department of Environment Conservation (NLDOEC).

1.2 Environmental Protection Plan Organization

This EPP has been developed for specific activities to be conducted in support of the construction and operations work carried out on the Project sites. It provides instructions for addressing both planned and unplanned activities/events associated with the construction and operations work. This EPP contains the following sections:

- **Section 1.0** introduces the EPP. It outlines the EPP purpose and organization, roles and responsibilities and environmental orientation.
- **Section 2.0** provides a description of the undertaking.
- **Section 3.0** lists the permits, approvals and authorizations that may be required for the undertaking, and provides an overview of compliance monitoring.
- **Section 4.0** describes environmental concerns and environmental protection procedures for planned construction and operations activities.
- **Section 5.0** outlines the contingency plans for potential unplanned and accidental events.

- **Section 6.0** describes procedures for revising the EPP.
- **Section 7.0** contains a list of key Project and regulatory contacts.
- **Section 8.0** lists references cited in the EPP, as well as a number of sources of further information.
- **Section 9.0** contains a signature page for employee and contractor sign-off.
- **Appendix A** is a list of abbreviations and acronyms.
- **Appendix B** is a Controlled Copy Distribution List.
- **Appendix C** is a Revision Request Form.
- **Appendix D** is a Revision History Log.
- **Appendix E** is a sample Site Check List Form.
- **Appendix F** is a sample Spill Report Form.

1.3 Roles and Responsibilities

Rambler will:

- Provide final approval for the EPP and any subsequent revisions;
- Monitor and inspect the work being carried out; and
- Liaise with relevant government agencies and community interest groups as required.

The designated Environmental Coordinator will:

- Distribute the EPP;
- Review revision requests;
- Conduct a review of the EPP on an as-needed basis;
- Distribute revisions to controlled distribution representatives, identified in Appendix B (Controlled distribution representatives are Rambler employees who will maintain copies of the EPP document); and
- Maintain document control;

The designated Site Manager will:

- Act as Rambler's representative on-site, responsible for environmental protection and will report any issues or developments related to environment to the Environmental Coordinator;
- Hold an environmental orientation session for contractors and their personnel, and any other personnel to be involved in the Project activities on an as-needed basis;

- Confirm Rambler workers and contractors/sub-contractors and their staff onsite are familiar with the EPP and its procedures and maintain a master file of all EPP orientation efforts and signature sheets;
- Implement the EPP on site and confirm that all workers are aware of the EPP and their responsibilities under the plan;
- Confirm Rambler workers and contractors/sub-contractors in the field review revisions;
- Communicate with the Environmental Coordinator about proposed work activities so that all applicable approvals, authorizations and permits can be obtained;
- Monitor or designate a representative to monitor construction and operation activities for compliance with the EPP, and all regulatory requirements and commitments;
- Report to the Environmental Coordinator any incidents of environmental non-compliance; and
- In the event of an emergency, contact the appropriate reporting agency as indicated in the EPP immediately, as well as the Environmental Coordinator.

The contractors, subcontractors, Rambler representatives, and site personnel will:

- Familiarize themselves with the EPP and any revisions;
- Sign that they have read, understood, and accept the conditions of the EPP prior to being approved to conduct work (see Signature Page in Section 9.0);
- Implement the EPP commitments;
- Confirm all personnel and subcontractors comply with the EPP, all requirements of the contract and with all applicable laws and regulations;
- Maintain a training record (record of names and dates when training was administered including the signature page in Section 9.0 of the EPP) and provide updated files on a monthly basis to the Environmental Coordinator;
- Maintain regular contact with the Environmental Coordinator, including, but not limited to:
    - Immediately reporting concerns to the Site Manager and/or Environment Coordinator (Rambler's Environment Team) of any aspect of the EPP; and
    - Immediately reporting any spills or other event that may have an effect on the environment to Rambler's Environment Team (Site Manager, Environmental Coordinator) and the appropriate regulatory contacts (Environment Canada etc.);
- Obtain all applicable approvals, authorizations and permits required to conduct the work and provide copies to the Environment Team;
- Implement any conditions outlined in approvals, authorizations and permits;
- Carry out clean-up, reclamation or restorative measures as directed by the Environment Team and/or appropriate government agency; and

- Contribute feedback to the Environmental Team any changes/comments they feel would improve the quality of the EPP.

1.4 Environmental Orientation

Through orientation and ongoing awareness training throughout the Project, Rambler will confirm that all personnel are competent to do their jobs properly. Workers will understand their roles and responsibilities, as well as the potential environmental effects of the overall project and their specific work activities. All workers will receive an orientation from an immediate superior prior to the start of any new activity and thereafter on an as-needed basis. All new personnel arriving at the site during the construction and operations phases will also receive an orientation, to be given by the Site Manager, or designate. The orientation will include a presentation on environmental protection procedures to be applied to all work. All necessary precautions will be taken during the work program to reduce the potential for spills. To achieve this, employees will receive orientation in spill response and reporting procedures and the Environmental Emergencies 24-Hour Report Line will be clearly posted in all work areas.

2.0 CONSTRUCTION AND OPERATIONS OVERVIEW

This EPP will cover the activities associated with the mine construction and operations on all the properties associated with the Project, including the extraction of ore through the re-development of the underground workings at the Ming Mine Site, milling at the Nugget Pond Mill, and shipping the copper concentrate to market via ships loaded at the Goodyear's Cove Port Facility.

The Project will operate under current provincial and federal regulations, environmental protection standards, and industry best practices.

2.1 Ming Mine Site

The Ming Mine property is located on the Baie Verte Peninsula, approximately 17 km by road east of the Town of Baie Verte, geographic co-ordinates: 49^0 54' N latitude and 56^0 05' W longitude (Figure 1-2). The mineral land assembly was acquired by Rambler in 2004 and consists of one map-staked mineral license 014692M and two mining leases (141L and 188L) totaling 1,580.4 ha (Figure 2-1) that were host to the former Ming and Ming West mines.

2.1.1 Development of the Ming Mine Site

In this undertaking, Rambler proposes to reactivate the former underground Ming Mine to further exploit the mineable reserves/resources at the Ming deposit. Development will be limited to an area of approximately 40 hectares within the existing disturbed footprint surrounding the former Ming underground mine and will make extensive use of the existing infrastructure. Existing site infrastructure is shown on Figure 2-2, and includes:

- Roads;
- Mine Dry facilities that includes a Mine Rescue room;
- A large Maintenance Garage with a Waste Water Treatment Plant (WWTP);
- Core Logging and Core Storage Building;
- Electrical Sub-station;
- Fuel Storage and Dispensing facility;
- Electrical Cold Storage Building;
- Mine Cold Storage Building; and
- Abandoned Boundary Shaft.

Much of this infrastructure will be used as-is or with minor upgrades. However there is a requirement for additional and/or refurbishment of some infrastructure to support the proposed mine operation. As shown on

Figure 2-3, this additional infrastructure will be completed within the existing disturbed footprint, and includes:

- Ore and Waste Stockpile Areas;
- Office and Mine Dry;
- New Maintenance Garage;
- Security/Scale House;
- Explosive Storage;
- Water Supply for Process, Firewater, and Potable Water; and
- Emergency Power Supply.

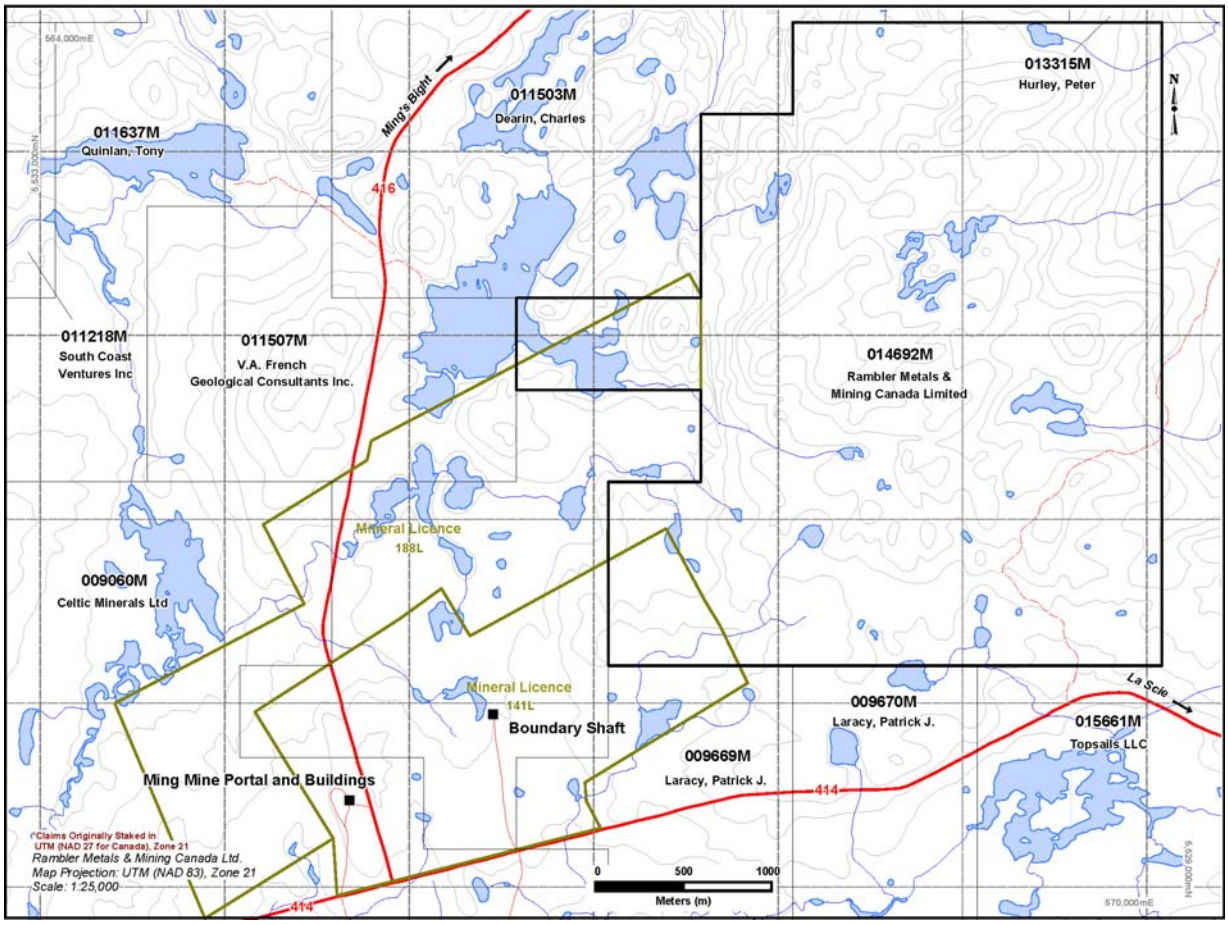

Figure 2-1 Rambler Property: Mineral Tenure and Map Staked Claims

Figure 2-2 Existing Infrastructure at the Ming Mine Site

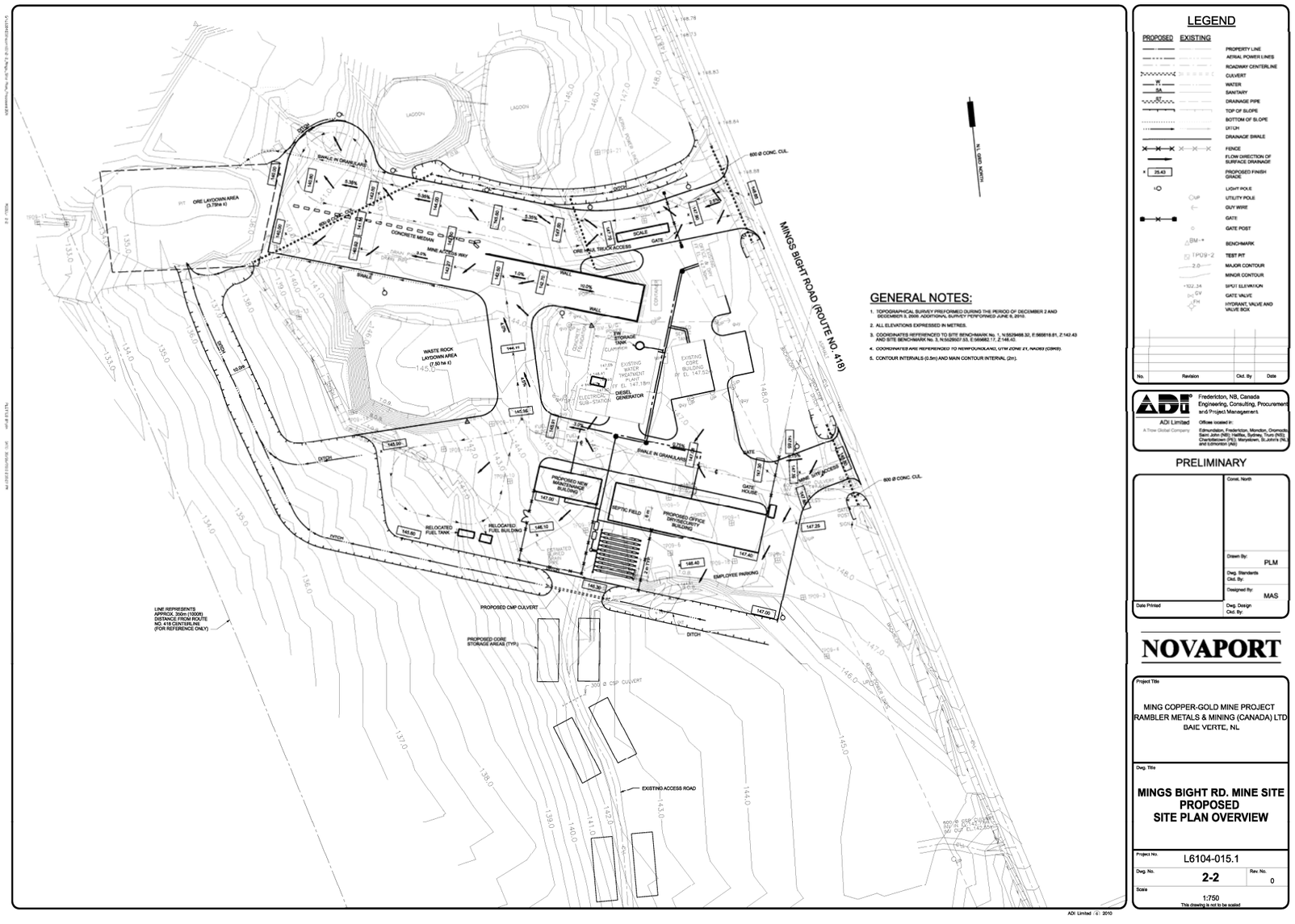

Figure 2-3 Planned Infrastructure at the Ming Mine Site

Construction of the proposed above-ground improvements at the Ming Mine Site is expected to be completed over an 8 month construction timetable. Work will include road and site development areas (excavation, gravels, drainage, buried services, septic, lighting, fencing, gates, etc), maintenance shop, office facility and miscellaneous items (fuel tank, generator, storage tank, barriers, etc).

Development of the underground mine workings is planned to occur over a 6 month pre-production phase. During this phase, access to areas of mineralization will be developed through an extension of the existing main decline ramp, as well as the other construction projects that are required for mining to advance (e.g., explosive magazines, refuge stations, sump stations and other infrastructure). Development waste will be hauled to the surface and stored in a temporary Waste Stockpile, which will be moved back progressively into the open stopes as backfill after they are mined out.

2.1.2 Operation of the Ming Mine Site

The Production Phase of the Ming Mine is expected to last seven (7) years at a nominal rate of 850 tonnes per day of ore. Total production will be 2.1 million tonnes of ore. Mining will be via an extension of existing underground workings. Major features of Project operations include:

- Ore will be mined underground using longhole mining and room and pillar mining methods;
- Mined ore will be hauled to surface using mine haulage trucks and stored in a temporary transfer Ore Stockpile;
- Ore will be loaded from the Ore Stockpile directly to highway haul trucks and transported to Nugget Pond Mill;
- During the early production stage, waste rock will be hauled to the surface and stored in a temporary Waste Rock Stockpile. As stopes are mined out, the development waste rock will be progressively moved back underground into open stopes as backfill;
- The underground workings will be dewatered through a series of sumps throughout the mine;
- Mine dewatering effluent, storm water, and run-off from surface infrastructure areas will be directed to the Ming West decline via the portal and then to the Waste Water Treatment Plant (WWTP). The WWTP will be used to treat and neutralize the effluents prior to discharge to the environment at the South Brook discharge point; and
- The sludge collected from the Waste Water Treatment Plant will be piped through a 100mm line from the plant back underground to the existing open stopes on 140m Level. The solids in the slimes will be allowed to settle out in the stopes and the excess water will be captured in the existing sumps and pumped back to surface into the Waste Water Treatment Plant.

2.2 Nugget Pond Mill Site

The Nugget Pond Mill is situated on the Baie Verte, Peninsula, approximately 6 km west of the community of Snook's Arm, geographic co-ordinates: $49^0$50'N Latitude and $55^0$45'W longitude (Figure 1-1). The Nugget Pond property covers approximately 10 hectares and is located approximately 40 km from the Ming Mine Site, and approximately 150 km from the Goodyear's Cove Site.

2.2.1 Development of the Nugget Pond Mill Site

Milling of the ore will be undertaken at a newly expanded Nugget Pond Mill. The Nugget Pond site was originally built and operated by Richmont Mines Inc. in 1997 and has an impeccable operating record with respect to environmental compliance (Figure 2-4). The facility features a fully operational gold hydrometallurgical facility with a fully permitted Tailings Management Facility (TMF). Much of the required infrastructure for the proposed operation currently exists (Figure 2-5). Existing infrastructure at the Mill Site includes:

- Road and Yard area;
- Office Building;
- Assay Lab;
- Sewage Treatment Plant;
- A Large Maintenance Garage;
- Cold Storage Buildings;
- Mill Building including Crusher, Ore Bin, Thickener and Leach Tanks;
- Ore Stockpile Area;
- Fuel Storage and Dispensing Facilities;
- Security House;
- Reclaim and Fire Pump House;
- Emergency Generator; and
- TMF (Tailings Pond, Polishing Pond and associated infrastructure).

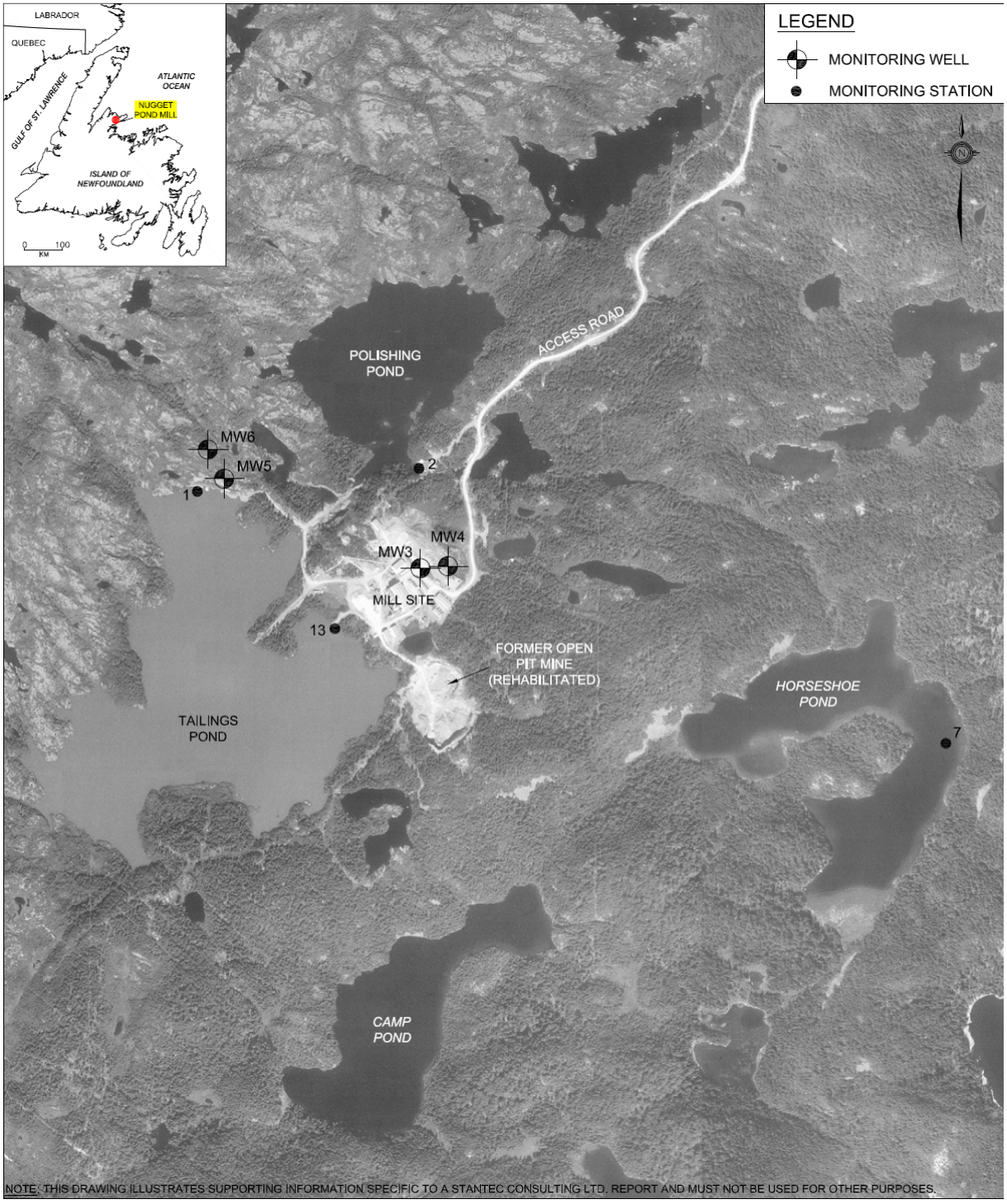

Figure 2-4 Aerial Photo of the Nugget Pond Mill Site

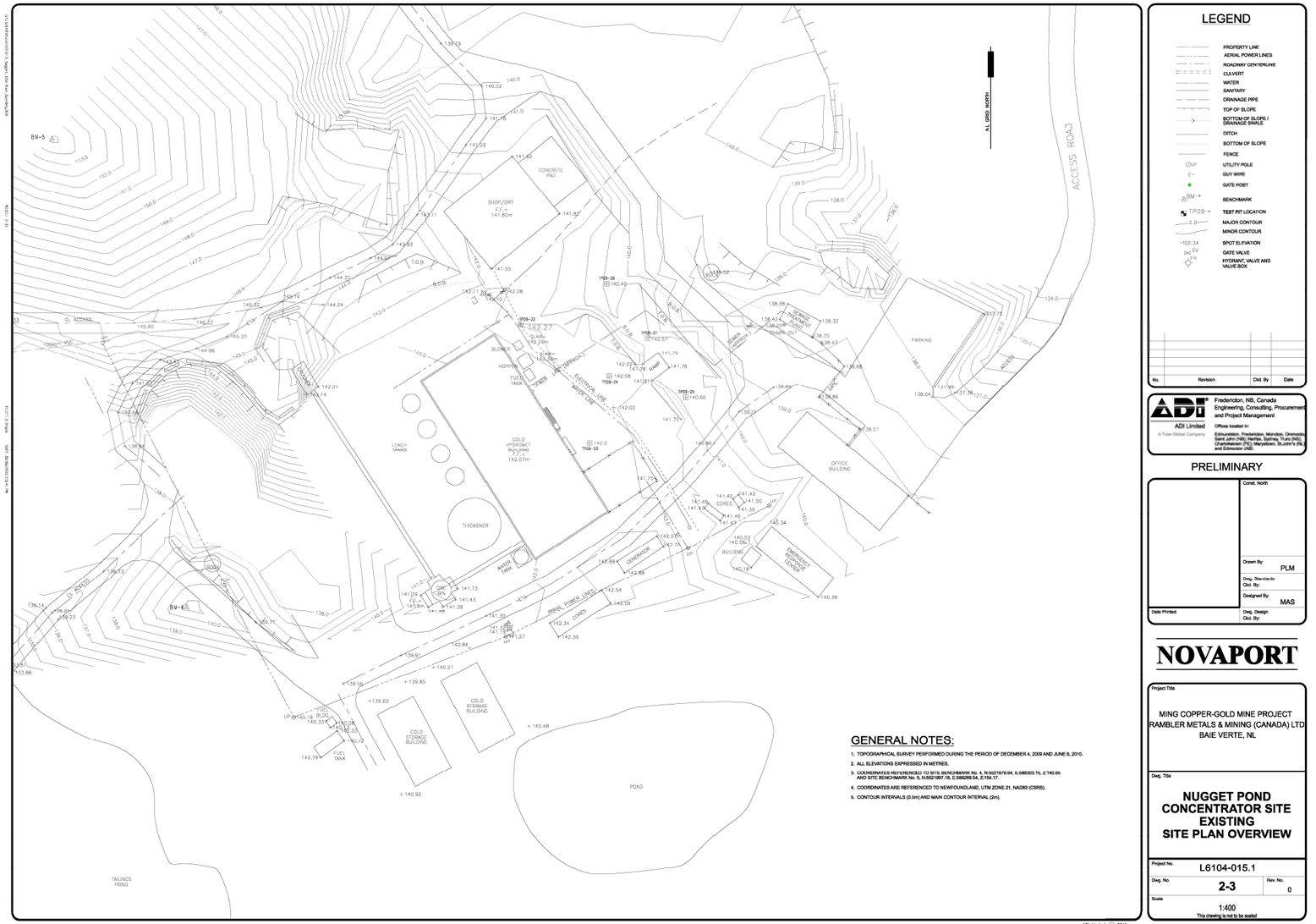

Figure 2-5 Existing Infrastructure at the Nugget Pond Site

In the proposed undertaking, the current gold concentrator will be modified to process base metal sulphides from the Ming Mine through the addition of a copper flotation circuit while leaving the existing gold hydrometallurgical facility intact.

The existing Tailings Pond and Polishing Pond system will be used for disposal of tailings from the concentrator The TMF has sufficient storage volume to contain the tailings that will be produced from the proposed undertaking and upgrades to the existing infrastructure (dams, flow conveyance structures etc.) are not required. An existing area on site will be used as a lay-down for outside storage of equipment delivered to site. Upgrades to lay-down area are not required.

Redevelopment will be completed within the existing disturbed footprint (Figure 2-6) of the site and no other significant changes or additions to the site are required.

Equipment procurement and delivery to site will be scheduled for the second and third quarter of 2010. Construction of the concentrator is to begin as early in 2010 as possible, pending permits and approval for completion of construction for the second quarter of 2011.

2.2.2 Operation of the Nugget Pond Mill Site

Operation of the copper flotation circuit is based on a 24 hour- 7 day a week operation. The on-stream availability for annual operating hours which includes down time for maintenance is expected to be about 90% - equivalent to 7,884 operating hours annually.

Production of copper concentrate is based on an average grade of 3% copper and 850 tonnes per day name-plate capacity (at ~92% recovery of copper as copper concentrate averaging a 29% copper grade) is 16,000 wet metric tonnes of copper concentrate annually. Copper concentrate will be dewatered to achieve a maximum of 8% moisture for bulk shipment.

Reagents used for copper flotation will be delivered to site in bulk bags or drum containers and/or tote tanks which are stored in the existing chemical storage facilities. The reagents will be moved from storage to the concentrator on an as-required basis. Reagents will be mixed within the concentrator building and contained in mix tanks installed within a containment berm area.

Copper concentrate will be dewatered and housed within a storage cell located within the concentrator. The storage cell with perimeter wall containment will have front-end loader access to enable bulk loading of the concentrate transfer trucks.

Tailings from copper flotation may be routed directly to tailings or to the existing tailings treatment system within the gold hydrometallurgical facilities prior to discharge to the tailings pond.

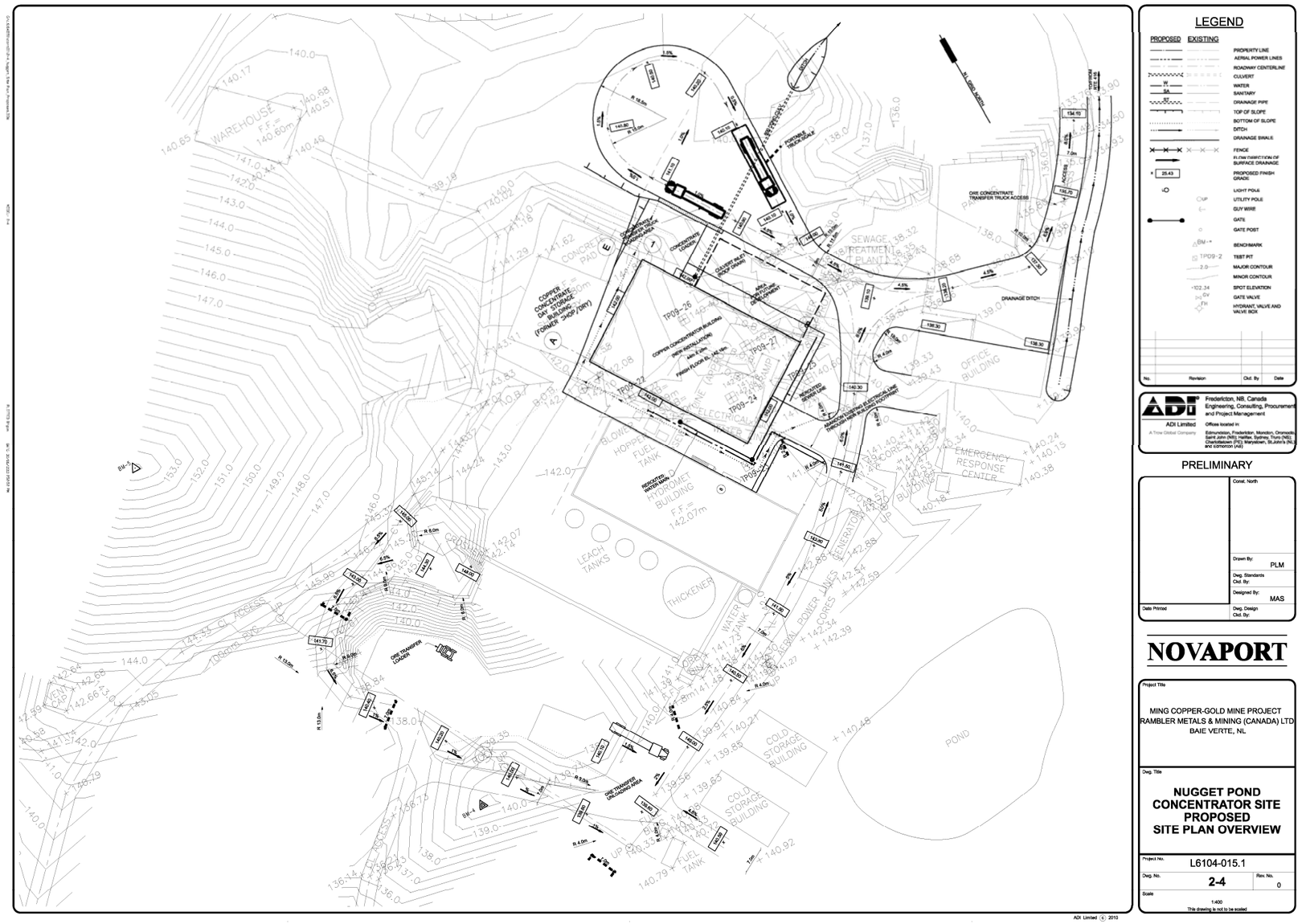

Figure 2-6 Planned Infrastructure at the Nugget Pond Site

2.3 Goodyear's Cove Site

Rambler's proposed operating port will be located at Goodyear's Cove situated in at the head of Halls Bay, NL, approximately 140 km from the Mill Site (Figure 1-1). This existing deepwater port is accessible through most of the year and is only 200 m from the TCH.

2.3.1 Development of the Goodyear's Cove Site

Rambler is currently working towards a lease agreement to lease the Goodyear's Cove Port Facility from the Town of South Brook for shipping of copper concentrate to market.

As the site was previously used by Crew Gold (Canada) Ltd. to import gold ore from Greenland for processing at Nugget Pond, redevelopment will require a concentrate storage building as the only significant alteration to the site. The concentrate storage building at Goodyear's Cove will be approximately 25 m wide by 50 m long and consist of a clear span pre-engineered steel structure supported on reinforced concrete foundations. This building will be constructed on an existing disturbed area and there are no other activities at the site that will require additional environmental alteration.

Refer to Figure 2-7, Figure 2-8 & Figure 2-9 for existing and planned infrastructure at the Goodyear's port facility.

Procurement of process equipment for the concentrate storage and handling systems is planned for second and third quarter of 2010. Construction of building and installation of mechanical / electrical systems is planned for fourth quarter 2010 for operations as of first quarter of 2011.

2.3.2 Operation of the Goodyear's Cove Site

The operation of the copper concentrate storage and ocean-going vessel loading facilities is based on a bulk shipment of approximately 5,000 tonnes of concentrate (dry weight basis) per shipment. The total live storage capacity of concentrate at the storage building as received from the concentrator is 6,500 tonnes.

Concentrate will be transferred from Nugget Pond in bulk truck loads and dumped into a hopper system which is isolated to minimize direct contact with the truck tires. The concentrate is stacked using a front-end loader within the concentrate storage building. The front-end loader will remain within the building and concentrate will be stored in a weather tight - fully enclosed building. Ventilation systems will be used to control exhaust fumes within the building and a dust control system will be installed to control fugitive dust at conveyor transfer points.

Loading of an ocean going vessel will be done using a portable conveyor system. The conveyor system will be mobile and will roll-out onto the dock to accommodate vessel loading operations. On completion of the vessel loading the conveyor system will be stored adjacent to the storage building to enable public access to the dock facilities.

During the vessel loading operations two loaders will be used for loading a hopper - conveyor system such that the loading of the hopper is within the storage building. The loading of the vessel is at a 600 to 850 tonnes per hour rate to achieve a loading time in the range 6 to 10 hours. The conveyor system leaving the storage building will be covered to avoid dust emission release.

Process water as required for wash down of system will be trucked to the Port site. Wash water will be reused as much as possible using a grey-water collection system. Once the grey-water is non-reusable it will be trucked to the Nugget Pond site for recovery of concentrate and treatment/disposal within the TMF.

Figure 2-7 Aerial Photo of the Goodyear's Cove Port Site

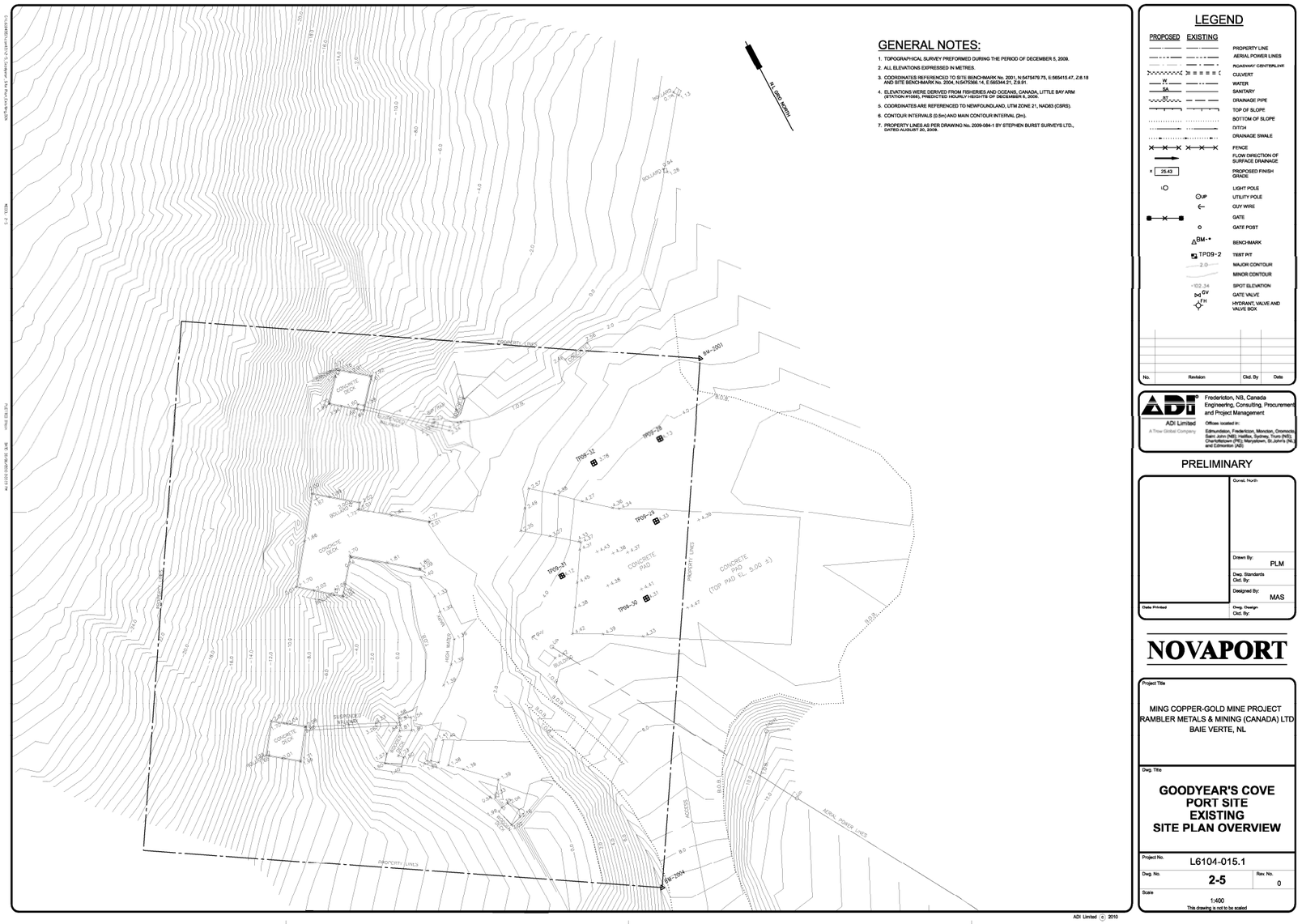

Figure 2-8 Existing Infrastructure at the Goodyear's Cove Port Site

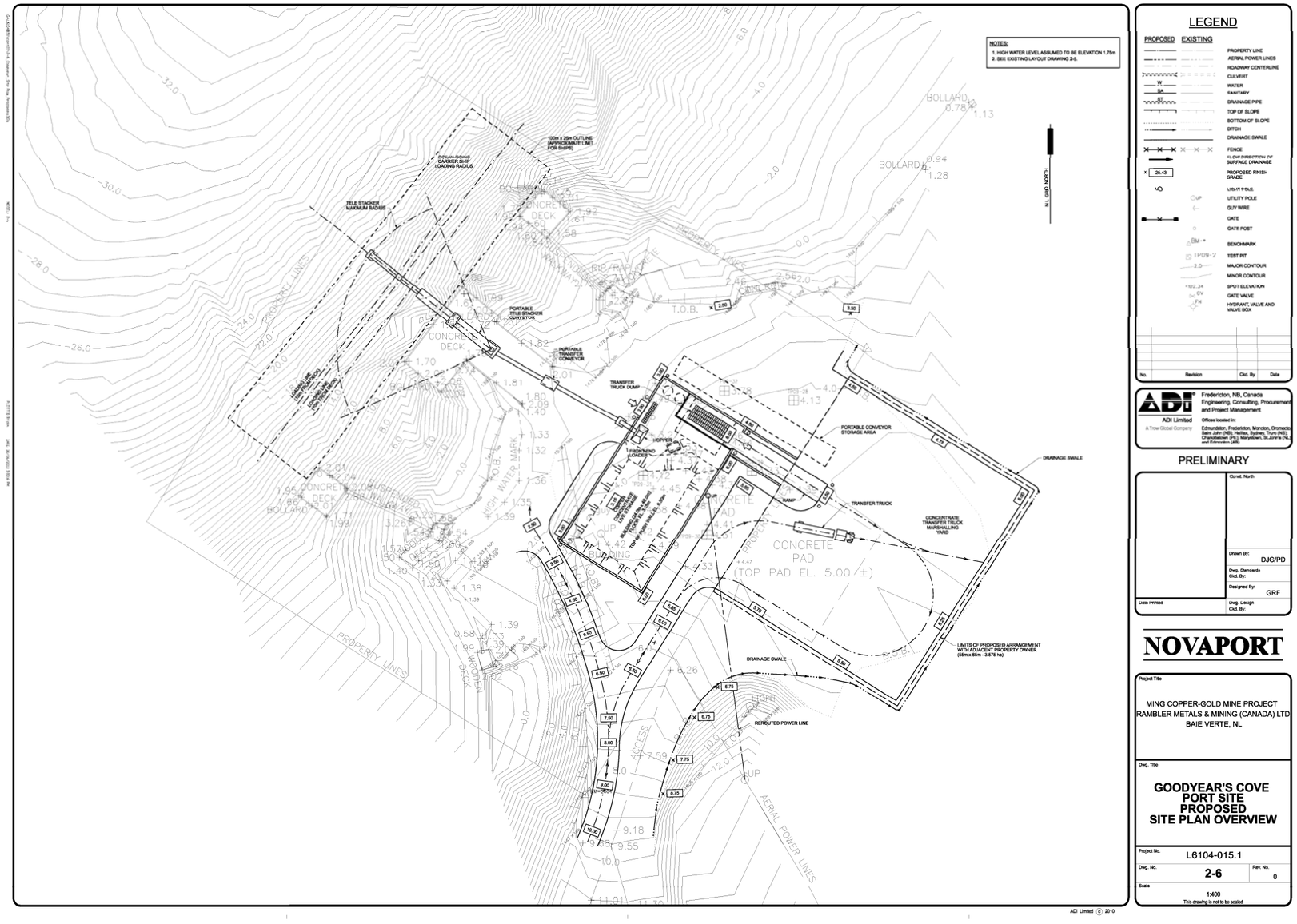

Figure 2-9 Planned Infrastructure at the Goodyear's Cove Port Site

3.0 REGULATORY REQUIREMENTS AND COMMITMENTS

3.1 Approvals, Authorizations and Permits

The major permits and authorizations that are currently in place for the Project are listed in Table 3-1, below. The Nugget Pond mill is a fully permitted operation, however the current Certificate of Approval permits, "care and maintenance" activities only. An updated C of A will be required for future operations. Minor permits (culverts, septic, etc.) currently in place for the Ming Mine and Nugget Pond Mill have not been listed below for existing operations. At Goodyear's Cove, Rambler understands that an Instrument of Grant has been issued to the Town of South Brook by Public Works and Government Services Canada for the use of this facility.

Additional permits that may be required for development and operation of the Project are provided in Table 3-2, below. Conditions or expiry dates attached to these permits should be considered as elements of this EPP and all personnel should be familiar with and adhere to all relevant permits and approvals.

Table 3-1 Permits and Authorizations Currently in Place

GOVERNMENT AGENCY	PERMIT, AUTHORIZATION, APPROVAL	SITE
PROVINCIAL AUTHORIZATIONS		
Department of Natural Resources		
Mines and Energy Branch	Underground Magazine License	Ming Mine
Mines and Energy Branch	Explosive Transportation Permit	Ming Mine
Mines and Energy Branch	Application for Exploration Approval & Notice for Planned Mineral	Ming Mine
Mines Branch	Quarry Permit	Ming Mine
Department of Government Services		
Government Services	Certificate of Approval – Storage and Handling of Associated Products	Ming Mine and Nugget Pond
Government Services	Permit of Flammable and Combustible Liquid Storage and Dispensing (above or below ground) and for bulk storage (above ground only)	Ming Mine and Nugget Pond
Government Services	Storage Tank System Application	Ming Mine and Nugget Pond
Government Services	Statutory Declaration for Registration of Boiler and Pressure Vessel Fitting Fabricated in Newfoundland	Ming Mine and Nugget Pond

Table 3-1 Permits and Authorizations Currently in Place (continued)

GOVERNMENT AGENCY	PERMIT, AUTHORIZATION, APPROVAL	SITE
PROVINCIAL AUTHORIZATIONS		
Department of Environment and Conservation		
Pollution Prevention Division	Certificate of Approval	Ming Mine (WWTP) and Nugget Pond
Environmental Assessment Division	Release from Environmental	Ming Mine, Nugget Pond, & Goodyear's Cove
FEDERAL AUTHORIZATIONS		
Industry Canada	Communication License	Ming Mine and Nugget Pond
Industry Canada	Radio License	Ming Mine and Nugget Pond

Table 3-2 Additional Permits & Authorizations Required for the Project

GOVERNMENT AGENCY	PERMIT, AUTHORIZATION, APPROVAL	ACTIVITY REQUIRING COMPLIANCE	SITE
PROVINCIAL & MUNICIPAL AUTHORIZATIONS			
Department of Environment and Conservation			
Pollution Prevention Division	Certificate of Approval	To operate the concentrator	Nugget Pond
Water Resource Division	Schedule A – Environmental Approval of Culverts	New Road Construction (if needed)	Ming Mine, Nugget Pond, & Goodyear's Cove
Water Resource Division	Schedule E – Environmental Approval of Pipe Crossing – Water Intake	Taking/pumping water from Admiral's Brook	Ming Mine
Water Resource Division	Certificate of Approval for Site Drainage	Water run-off for Project Site	Ming Mine, Nugget Pond
Water Resource Division	Water Use Authorization		Ming Mine, Nugget Pond
Water Resource Division	Certificate of Approval	Temporary AGM (ARD) Storage	Ming Mine
Pollution Prevention Division	Certificate of Approval	Industrial Facilities or Processing Work	Ming Mine & Nugget Pond
Pollution Prevention Division	Environmental Protection Plan - Construction	General	Ming Mine, Nugget Pond, & Goodyear's Cove

Table 3-2 Additional Permits & Authorizations Required for the Project (continued)

GOVERNMENT AGENCY	PERMIT, AUTHORIZATION, APPROVAL	ACTIVITY REQUIRING COMPLIANCE	SITE
PROVINCIAL & MUNICIPAL AUTHORIZATIONS			
Department of Environment and Conservation			
Pollution Prevention Division	Emergency Response Plan	General	Ming Mine, Nugget Pond, & Goodyear's Cove
Pollution Prevention Division	Environmental Effects Monitoring Plan	Effluent Discharge	Ming Mine & Nugget Pond
Department of Natural Resources			
Mines Branch	Development Plan, Rehabilitation and Closure Plan (including financial assistance), and Mill License	General	Ming Mine, Nugget Pond, & Goodyear's Cove
Department of Government Services			
Government Services	Certificate of Approval	Water & Sewer Distribution System	Ming Mine
Government Services	License to Occupy Crown Land	Occupy Land	Ming Mine & Nugget Pond
Government Services	Certificate of Approval	Sewage Treatment Plant	Nugget Pond
Government Services	Certificate of Approval	Water Supply > 4,500 L/day	Ming Mine & Nugget Pond
Government Services	Building Accessibility Exemption	General	Ming Mine, Nugget Pond, & Goodyear's Cove
Government Services	Certificate of Plant Registration for Power, Heat, Refrigeration, Compressed Gas or Combined Plant	General	Ming Mine & Nugget Pond
Government Services	Contractor's License	Pressure Piping System	Ming Mine & Nugget Pond
Government Services	Examination and Certification of Welders and Blazers	General	Ming Mine & Nugget Pond
Government Services	Waste Management Plan	General	

Table 3 2 Additional Permits & Authorizations Required for the Project (continued)

GOVERNMENT AGENCY	PERMIT, AUTHORIZATION, APPROVAL	ACTIVITY REQUIRING COMPLIANCE	SITE
PROVINCIAL & MUNICIPAL AUTHORIZATIONS			
Department of Transportation and Works			
Transportation and Works	Compliance Standard – Storing Handling and Transportation Dangerous Goods	General	Ming Mine & Nugget Pond
Municipal Approvals			
Town of Baie Verte, Snook's Arm and South Brook	Development Permit for Activities within Town Boundary / Approval to use Disposal Site	General	Ming Mine, Nugget Pond, & Goodyear's Cove
FEDERAL AUTHORIZATIONS			
Transport Canada			
Transport Canada	Permit to Store, Handle and Transport Dangerous Goods	General	Ming Mine, Nugget Pond, & Goodyear's Cove
Transport Canada	Navigable Waters Protection Act (referral)	General	Goodyear's Cove
Department of Fisheries and Oceans			
Marine Environment and Habitat Management Division	Authorization for Harmful Alteration, Disruption or Destruction (HADD) of Aquatic Habitat or letter of advice stating that an authorization is not required	Any work that could impact fish habitat	Goodyear's Cove
Environment Canada			
Environment Canada	Compliance Standard – Fisheries Act, Section 36 (3), Deleterious Substances	Any Project Related Run-off MMER also requires periodic characterization of effluent and monitoring of receiving water quality. Periodic biological monitoring is also required with regard to potential effluent related environment effects.	Ming Mine, Nugget Pond, & Goodyear's Cove

3.2 Environmental Compliance Monitoring

Inspections and monitoring ensure the implementation of the environmental protection measures that are specified in this document and that will be specified in the applicable contracts and other relevant permits, approvals and authorizations.

Site Inspections

Site inspections will be completed before, during, and within 7 days after any site disturbances related to construction and operations activities performed by Rambler, or contractors on behalf of Rambler. Site inspections will be conducted by trained personnel and details recorded on the Site Check List Form located in Appendix E. For site inspections conducted prior to any construction or operations activity, details including vegetation, general terrain/topography, and drainage patterns will be recorded. Photographs should be taken during each site inspection. The required frequency of site inspections performed during construction and operations activities will be determined by the Environmental Coordinator (or designate) and will depend on the duration and type of activity being performed.

These regular site inspections will aid in the implementation of the environmental protection measures that are specified in this document and that will be specified in the applicable contracts and other relevant permits, approvals and authorizations.

Any environmental issues or concerns should be reported to the Site Manager and the Environmental Coordinator.

Monitoring

Monitoring will also confirm that all construction and operations activities comply with applicable regulatory requirements and that mitigation measures are being employed effectively.

The Environmental Coordinator will:

- Be responsible for environmental compliance monitoring on-site; and
- Instruct the contractor on the environment-related general, special, and technical clauses to be implemented as part of the contract(s).

Compliance monitoring will be required for various activities during construction and operations. Monitoring of site run-off at the construction and operation sites will be conducted as per provincial requirements. Other federal and provincial government compliance standards that apply to the construction and operations activities include but are not limited to those listed in Table 3-3. Personnel will comply with all relevant approvals, authorizations, permits and legislation.

Table 3-3 Environmental Compliance Standards

Legislation/ Guidelines	Activity Requiring Compliance	Responsible Agency	Comment
Federal Regulations			
Fisheries Act, S36(3), Deleterious Substances	Discharge from the site to receiving waters	Environment Canada	The deposit of any material into waters frequented by fish or to an area that may enter waters frequented by fish must be non-deleterious to fish (i.e. must be non-acutely lethal). All materials that may enter waters frequented by fish must comply with the Act. There will be no work below the high water mark of any surface water features. MMER sets criteria that must not be exceeded for listed deleterious substances as well as a requirement for Acute Lethality Testing (ALT). Note 1. In addition to establishing criteria, the Regulation also requires the implementation of an Environmental Effects Monitoring (EEM) program
Transportation of Dangerous Goods Act and Regulations	Handling and transporting of dangerous goods.	Transport Canada	If the materials are transported and handled fully in compliance with the regulations, a permit is not required. A Permit of Equivalent Level of Safety is required if a variance from the regulations is necessary.
Canadian Environmental Protection Act	Activities that have the potential to interact with the environment and human health.	Environment Canada	CEPA provides framework for setting environmental quality objectives, guidelines and codes of practice, pollution prevention plans, regulation of toxic substances, controlling pollution of other wastes and environmental emergency plans
Species at Risk Act	Mortality of endangered species or other species under federal authority.	Environment Canada	Measures must be taken to avoid or lessen adverse effects on species at risk and that effects are monitored. Mitigation measures must be consistent with recovery strategies and action plans for species.
Provincial Regulations			
Environmental Protection Act, Part IV	Ming Copper-Gold Mine Project	Pollution Prevention Division, NLDOEC (PP-NLDOEC)	All waste material shall be considered, prior to disposal, for reuse, resale or recycling. All waste materials shall be disposed at an approved waste disposal site.
Environmental Protection Act, Part VI	Ming Copper-Gold Mine Project	PP-NLDOEC	All activities are subject to the *Air Pollution Control Regulations.* Materials as stipulated in the Regulations cannot be burned in the open.
	Site drainage discharge	PP-NLDOEC	All waters discharged must comply with the *Environmental Control Water and Sewage Regulations*. Note 2.
	Storage, handling and disposal of gasoline and other fuels.	PP-NLDOEC	Petroleum storage and handling is subject to the *Storage and Handling of Gasoline and Associated Products Regulations*. Refer to Section 5.1 of the EPP for the Fuel and Hazardous Material Spills Contingency Plan.
	Disposal of used oil.	PP-NLDOEC	The storage and disposal of used oil is subject to the *Used Oil Control Regulations*.
	Handling and storage of hazardous materials.	Occupational Health and Safety Division, Department of Government Services	Activities involving the use of designated hazardous materials are subject to *Workplace Hazardous Materials Information System.* WHMIS outlines procedures for handling hazardous materials and provides details on various hazardous materials.

Table 3-3 Environmental Compliance Standards (continued)

Legislation/ Guidelines	Activity Requiring Compliance	Responsible Agency	Comment
Provincial Regulations			
Dangerous Goods Transportation Act and *Regulations*	Transporting fuel to the site.	Department of Works, Services and Transportation	Transporting goods considered dangerous to public safety must comply with regulations.
Historic Resources Act	Construction and operation activities.	Cultural Heritage, Archaeology Section, Department of Tourism, Culture and Recreation	All archaeology sites and artifacts are considered the property of the Crown and must not be disturbed. Any archaeology materials encountered must be reported to the Provincial Archaeology Office.

Note 1. MMER also requires periodic characterization of effluent and monitoring of receiving water quality. Periodic biological monitoring is also required with regard to potential effluent related environment effects.

Note 2. EEM requirements set out under the C of A are usually harmonized with those required by MMER.

3.3 Rehabilitation and Closure

Rambler is committed to full rehabilitation and closure of the Project. The requirements and planning of rehabilitation and closure activities is different for each of the three sites, and the general goals and activities for each are described separately below. A fully integrated Rehabilitation and Closure Plan will be developed for this Project under separate cover with accompanying financial assurance for submission to the Newfoundland and Labrador Department of Natural Resources (NLDNR) in accordance with the requirements of the *Mining Act* (1999).

3.3.1 Ming Mine Site

Once mining is completed and all reserves depleted, all surface and underground infrastructure will be removed, all mine wastes will be returned underground, all underground openings will be properly sealed, and the ground surface will be reclaimed and re-vegetated. The rehabilitation and closure work at this site will address historical liabilities, where applicable, including mine waste at surface, unprotected mine openings, and deteriorated surface infrastructure.

3.3.2 Nugget Pond Mill

A Rehabilitation and Closure Plan has been completed for the existing Nugget Pond Mill and associated facilities; however, this will be updated to include the proposed addition to the mill, which will house the copper flotation circuit. In general, all buildings and infrastructure will be removed, dams will be re-contoured to re-establish natural flow patterns, underground openings (related to historical mining) will be permanently capped, and all disturbed areas will be reclaimed and re-vegetated, where necessary. Rambler will obtain a permit under Section S48 of the Water Resource Act prior to conducting any work on the dams.

3.3.3 Goodyear's Cove

This site is currently owned by the Town of South Brook, and once the facility is no longer needed by Rambler, the lease agreement will be terminated. As part of the termination of the lease, any infrastructure installed or moved to the site will be offered for sale to the owner. Any infrastructure not purchased by the owner will be removed from the site and the site will be returned to the condition at the time of commencement of the lease.

3.4 Reporting

3.4.1 Internal Communication

Environmental performance and issues during construction and operation activities associated with the Project will be communicated internally as required. The Site Manager is responsible for communicating Rambler policies and procedures and legal and other requirements to workers. Workers will communicate all environmental incidents to the Site Manager as per the Emergency Call Out & Reporting Procedures. EPP orientation and sign-off for new staff/contractors onsite will also be conducted by the Site Manager, or designate, prior to start of work.

3.4.2 External Communication

When required, Rambler, through the Environmental Coordinator, will report on environmental issues relating to construction and operations activities for the Ming Copper-Gold Mine Project to the NLDOEC. Issues, which may be communicated include, but are not necessarily limited to:

- Dust;
- Erosion;
- Historic resources;
- Wildlife encounters of note; and
- Permits and authorizations.

Any spills of petroleum products or other hazardous materials will be reported immediately to the:

Environmental Emergencies 24 Hour Report Line (Coast Guard Traffic Centre, St. John's)
(St. John's: **709-772-2083** or Other Areas: **1-800-563-9089**).

The *Fisheries Act* requires all spills to be reported, regardless of size. Any spills in ditches or on roadways or in any other place that may enter waterways frequented by fish must also be reported.

Additionally, if construction or operation activities require removal of any merchantable timber, Rambler will contact the NLDNR, Forest Resources Branch.

Instruction in Health and Safety issues is provided under separate cover as part of Rambler's existing Health and Safety (H&S) program.

4.0 ENVIRONMENTAL PROTECTION PROCEDURES

This Section provides a description of environmental protection procedures for the following construction and operations-related activities that are anticipated at one, or more of the Project properties:

4.1 Surveying
4.2 Buffer Zones
4.3 Laydown and Storage Areas
4.4 Clearing Vegetation
4.5 Grubbing and Disposal of Related Debris
4.6 Overburden
4.7 Excavation, Embankment and Grading (including cutting and filling)
4.8 Erosion Prevention and Sediment Control
4.9 Water Supply
4.10 Watercourse (Stream) Crossings
4.11 Exploration Drilling
4.12 Pumps and Generators
4.13 Dewatering Work Areas and Site Drainage
4.14 Equipment Installation, Use and Maintenance
4.15 Storage, Handling and Transfer of Fuel and Other Hazardous Material
4.16 Propane
4.17 Waste Disposal
4.18 Sewage Disposal
4.19 Hazardous Waste Disposal
4.20 Vehicle Traffic
4.21 Dust Control
4.22 Noise Control
4.23 Road Maintenance
4.24 Building Construction
4.25 Drilling and Blasting
4.26 Waste Rock and Ore/Concentrate
4.27 Processing Activities

When required, this EPP will be revised to include new or amended environmental protection procedures so that construction and operations activities conducted for the Project are completed properly and that the significant environmental aspects of the site are well managed.

4.1 Surveying

Environmental Concerns

Surveying activities could potentially disturb wildlife species, vegetation and historic resources.

Environmental Protection Procedures

a) Width of survey lines will be limited to that which is necessary for line of sight and unobstructed passage.

b) Whenever possible, cutting lines to the boundary between treed and open areas will be avoided.

c) Trees and shrubs will be cut flush with the ground wherever possible.

d) Cutting of survey lines will be kept to a minimum. Where possible, alternate areas not requiring cut lines will be used.

e) All trees not exactly on transit lines shall be left standing.

f) When surveying the site limit, areas that will be cleared require a modified adherence to the above, except trees, shrubs and areas to be saved or left natural as noted on the plans or marked in the field.

g) No attempt to harass or disturb wildlife will be made by any worker (refer to Section 5.2).

h) Vehicles will yield the right-of-way to wildlife and no attempt to harass or disturb wildlife will be made by any worker.

i) There will be no cutting in areas designated as sensitive without notification and approval of Site Manager.

j) Any historic resource discoveries will be reported to the Culture and Heritage Division (see Section 5.4).

k) All sites where surface disturbances are planned or may occur will be inspected and monitored prior to, during, and after the work as described in Section 3.2.

l) All-terrain vehicles (ATVs) will not be allowed off the right-of-way except as approved by the Site Manager. The use of ATVs will be restricted to designated trails, thus minimizing ground disturbance. ATV use will comply with the Motorized Snow Mobile and All-Terrain Vehicle Regulations, 1996 under the *Motorized Snow Mobile and All-Terrain Vehicle Act* and the Environmental Guidelines for Stream Crossings by All-Terrain Vehicles issued by the NLDOEC.

m) No motorized vehicles will enter the areas designated as sensitive without notification and approval of the Site Manager.

n) Benchmarks, under normal ground conditions comprise a 15 mm x 400 mm long rebar driven approximately 350 mm into the surface with an 8-lb sledgehammer. When bedrock or a large boulder is encountered less than 300 mm below the ground surface, a 15 mm x 150 mm long rebar is cemented in a hole drilled in the rock. The rebar will be set into the rock a minimum distance of 80 mm.

4.2 Buffer Zones

Environmental Concerns

Buffer zones are boundaries of undisturbed vegetation maintained along water bodies. Without adequate buffer zone vegetation, streams, ponds and lakes can potentially become laden with silt from run-off. Vegetation also provides cover for fish.

Environmental Protection Procedures

As much as possible, a minimum buffer zone of 15 m of undisturbed natural vegetation is to be maintained between work areas and water bodies.

Where possible, additional, buffer widths will be maintained according to the guidelines shown in Table 4-1.

Table 4-1 Recommended Minimum Buffer Zone Requirements for Activities near Watercourses

Activity	Recommended Buffer Width
Development around watercourses in urban or other developed area	15 m depending upon site specific considerations
Resource roads or highways running adjacent to water bodies	20 m + 1.5 X slope (%)
Piling of wood and Slash Grubbing	30 m
Placement of Site Trailers Fuel storage	100 m
Source: Gosse et al. 1998.	

4.3 Laydown and Storage Areas

Environmental Concerns

Areas will be required for storing and maintaining equipment and supplies during construction and operations activities associated with the Project. Potential erosion and run-off of sediment into nearby water bodies must be prevented.

Environmental Protection Procedures

a) Existing laydown and storage areas will be used, where feasible.

b) Any new ore/waste rock laydown, maintenance or storage areas required for construction and operations activities will only be established within the site boundaries and to applicable specifications.

c) Establishing any new laydown or storage areas will follow the procedures for vegetation clearing (Section 4.4), grubbing and debris disposal (Section 4.5), and erosion prevention (Section 4.8).

d) External storage areas will be placed on level terrain and kept free of ponding or run-off.

e) Drainage from areas of exposed soil will be controlled by grade or ditching and directing run-off away from water bodies.

f) Laydown and storage areas no longer required for construction and operations activities will be rehabilitated.

g) Fuel will be stored, handled and transported according to Section 4.15.

4.4 Clearing Vegetation

Environmental Concerns

Although the redevelopment of Project is intended to be completed largely within existing disturbed footprints, limited vegetation clearing (e.g., trees, shrubs, etc.) may be required. Potential concerns include stockpiling vegetation in or near watercourses, roadways or open pits/shafts, uncontrolled burning, or potential scheduling of clearing in bird-nesting areas during nesting periods.

Environmental Protection Procedures

a) Clearing activities will comply with the requirements of all applicable permits, including the Permit to Burn.

b) Clearing or removal of trees will be kept to a minimum.

c) Notice should also be given about the mortality of any endangered species (under federal regulation). Clearing will consist of cutting to within 15 cm of the ground and disposing of all standing trees, as well as removing all shrubs, debris and other vegetation from the area. These materials will be stacked clear of on-going activities for future rehabilitation. The *Environmental Protection Guidelines for Ecologically Based Forest Resource Management* (DFRA 1998*)* will be observed.

d) In the event that usable or merchantable timber is removed during vegetation clearing, Rambler will notify the NLDNR, Forest Resources.

e) Disposing of cleared un-merchantable timber, slash and cuttings by burning will comply with the *Forest Fire Regulations, 1996 (a*mended 2002) under the *Forestry Act*, Environmental Code of Practice for Open Burning and the Permit to Burn (from NLDNR). At no time will a fire be left unattended.

f) Slash and any other material or debris related to construction or operations activities will not be permitted to enter any watercourse, and will be piled above spring flood levels and retained for final rehabilitation efforts.

g) Chain saws or other hand-held equipment will be used in clearing vegetation except where alternative methods or equipment is approved by Rambler, such as mechanical harvesters. The use of mechanical clearing methods, such as bulldozers, will not be permitted except where it can be demonstrated that there is no merchantable timber, and where the resulting terrain disturbance and erosion will not result in the loss of topsoil or the sedimentation of nearby waterbodies.

h) As much as possible, a minimum 15 m buffer zone of undisturbed vegetation will be maintained between the development area and all other waterbodies (Section 4.2).

i) Timber shall be felled inward toward the work area to avoid damaging any standing trees within the immediate work area.

j) Workers will not destroy or disturb any features indicative of a cultural or archaeological site. Such features should be avoided until a report has been made to the Provincial Archaeology Office and clearance to proceed has been received.

k) All sites where surface disturbances are planned or may occur will be inspected and monitored prior to, during, and after the work as described in Section 3.2.

4.5 Grubbing and Disposal of Related Debris

Potential Environmental Concerns

Although the redevelopment of Project sites is intended to be completed largely within existing disturbed footprints, limited grubbing may be required. The principle concerns associated with grubbing and disposal of related debris are the potential adverse effects on freshwater ecosystems and water quality through the release of sediment into watercourses, as well as the potential for disturbing historic resources.

Environmental Protection Procedures

a) Grubbing of the organic vegetation mat and/or the upper soil horizons will be restricted to the minimum area required.

b) The organic vegetation mat and upper soil horizon material that has been grubbed will be spread, in a manner to cover inactive exposed areas or retained for use in rehabilitation efforts.

c) Notice should also be given about the mortality of any endangered species (under federal regulation).

d) Any surplus of such material will be stored or stockpiled for site rehabilitation and revegetation purposes. Topsoil and organics should be stored in low (1 to 2 metres high) stable piles (Gosse et al. 1998). The location of the stockpiles will be recorded and accessible for future rehabilitation purposes.

e) Measures will be implemented to reduce and control runoff of sediment-laden water during grubbing, and the re-spreading and stockpiling of grubbed materials. Where grubbed materials are re-spread or stockpiled, as many stumps and roots as possible will be left on the ground surface to maintain soil cohesion, dissipate the energy of runoff and promote natural revegetation. Erosion control measures will be implemented in areas prone to soil loss (Section 4.8).

f) The length of time that inactive grubbed areas will be left exposed to the natural elements will be minimized to prevent unnecessary erosion. Mitigations such as the placement and maintenance of silt curtains will be used to prevent erosion from exposed areas.

g) Grubbing activities will adhere to the buffer zone requirements outlined in Section 4.2.

h) During grubbing, grubbed material will not be pushed into areas that are to be left undisturbed. Grubbing material will be buried with 60 cm of soil cover.

i) Discovery of historic resources will be handled according to the procedures outlined in Section 5.4.

4.6 Overburden

Environmental Concerns

Although the redevelopment of Project sites is intended to be completed largely within existing disturbed footprints, limited works involving overburden may be undertaken. The principal concern associated with the placement of overburden is potential siltation of the aquatic environment, pertaining to water quality and substrate, as well as loss of habitat and displacement of wildlife.

Environmental Protection Procedures

a) Overburden storage areas will be located at least 50 m from any waterbody on well drained soil (Gosse et al. 1998).

b) If required, collection ditches and settling ponds will be used to manage surface runoff from overburden stockpiles.

c) Overburden will be stored in stable piles and sloped to prevent pooling of surface water pending use in site rehabilitation efforts.

4.7 Excavation, Embankment and Grading (including cutting and filling)

Environmental Concerns

Only minor land disturbance may be required given the existing infrastructure already in place. The principal environmental concern associated with excavation, embankment and grading are the potential impacts on aquatic ecosystems and water quality due to runoff of sediment-laden water.

Environmental Protection Procedures

Work will be conducted with the minimum amount of disturbance necessary. All works within 15 m of waterbodies or watercourses will strictly follow the requirements outlined in the acquired watercourse alteration approvals from the NLDOEC and the Department of Fisheries and Oceans (DFO). Work will be conducted in a manner that controls potential sedimentation of watercourses and waterbodies in or adjacent to the work areas as outlined in the following procedures. No work below the high water mark of any surface water feature will be conducted without the prior notification and assessment by the Environmental Coordinator.

a) During excavation, embankment and grading activities, excavated materials will be sorted into separate stockpiles (i.e. topsoil, overburden, waste rock) for later rehabilitation purposes and to prevent mixing.

b) Excavation, embankment and grading within 15 m of a stream crossing will be done in such a manner that erosion and sedimentation of watercourses and waterbodies is minimized and strictly follows the requirements outlined in the acquired watercourse alteration approvals from the NLDOEC and DFO.

c) A buffer zone of undisturbed vegetation will be maintained between Project activities and all watercourses, as per Section 4.2.

4.8 Erosion Prevention and Sediment Control

Environmental Concerns

Eroded material could potentially cause siltation in water bodies and, subsequently, potentially decrease suitable habitat for aquatic and terrestrial animals.

Environmental Protection Procedures

a) All work relating to the construction and operations activities for the Project will be conducted according to the conditions set out in the permits and/or approvals and authorizations from the NLDOEC.

b) Primary means for controlling erosion is avoiding activity that contributes to erosion. The disturbance of new areas will be minimized. New disturbances are expected to be minimal.

c) Drainage ditches will be stabilized if required (e.g., lining with vegetation or rock, terracing, interceptor swales, installation of rock check dams) to reduce soil erosion. Any such measures will be properly maintained following installation.

d) All areas of exposed erodible soil will be stabilized by back-blading, grading and/or compacting to meet engineered slope requirements.

e) If an environmental inspection reveals that silt is entering any waterbody, further mitigative measures will be implemented, such as temporary drainage ditches, siltation control (settling) ponds, ditch blocks/check dams or sediment dam traps, to intercept run-off. The necessary or appropriate measures will be determined in the field.

f) All work and laydown and storage areas will be monitored for erosion and appropriate repair action taken as necessary.

g) Existing or new siltation control structures used in this work will be monitored by the contractor for excessive accumulation of sediment. The contractor will remove accumulated sediment from control structures to gain full effectiveness of the systems. Effluent from control structures will be released to flow overland for appropriate filtration prior to entering any waterbody.

h) The contractor will be required to remove excess water from siltation control systems prior to excavation of sediment. Trucks will be equipped with liners to prevent loss of wet sediment during transport.

4.9 Water Supply

Environmental Concerns

At the Ming Mine Site, drinking water will be imported to the site in large bottle format by local vendors. Fresh water for showers, toilets, etc. will be sourced from nearby Admiral's Brook (England's Steady). A small intake and pump house will be constructed on Admiral's Brook and direct pumped water to a storage tank on site via an estimated 150 mm diameter, above ground HDPE supply line. Water will be piped from the storage tank to areas around the site as required. Environmental concerns related to surface water supply include potential detrimental effects to the fish habitat (and populations) in and around the potentially affected waterbody.

At the Nugget Pond Mill Site, potable water will be supplied by the existing artesian well system. Use of groundwater wells can lead to a negative impact on the surrounding groundwater, however withdrawals at the site are expected to be limited. All process water, fire water, etc for the operations of the mill will be recycled/reclaimed water from the existing TMF (tailings pond and/ or polishing pond), limiting the need to impact new water resources. The reclaim of water from the Tailings Pond will utilize the existing pumping system. In the event that water will be required to be reclaimed from the Polishing Pond, a new pumping system will be installed. All water will be treated prior to use.

At the Goodyear's Cove Port Site, water use will be limited. Process water as required for wash down of system will be trucked to the Port site. Wash water will be reused as much as possible using a grey-water collection system. Once the grey-water is non-reusable it will be trucked to the Nugget Pond site for recovery of concentrate and treatment within the tailings treatment system.

Environmental Protection Procedures

a) The water intakes must have an appropriate screen to prevent damage to fish. Guidelines for the screening of water intakes are provided by DFO (1995).

b) Water withdrawals at the Ming Mine Site from Admiral's Brook will be limited to less than 1% of the total flow to limit any adverse impact on fish or fish habitat.

c) Rambler will ensure that potable drinking water meets all the Guidelines for Canadian Drinking Water. The water supply well at Nugget Pond will be routinely tested to ensure it meets or exceeds Canadian Drinking Water Guidelines.

4.10 Watercourse (Stream) Crossings

Currently, there are no plans to install new watercourse crossings. This section of the EPP is included in the event culverts are required for stream crossings.

Potential Environmental Concerns

Although all water crossings required are currently in place, the potential environmental concerns associated with stream crossings and culvert installations include potential direct disturbances to or mortality of fish, and potential loss of fish habitat resulting from sedimentation and removal of habitat and stream bank vegetation. An evaluation of soil erosion potential will be conducted at each of the stream crossings. This assessment of potential erosion risk will assist in the development of specific erosion stabilization methods and effective sedimentation control practices on a site-specific basis.

Environmental Protection Procedures

No work below the high water mark of any surface water feature will be conducted without the prior notification and assessment by the Environmental Coordinator. Stream crossings will be constructed in compliance with the required Permit for Culvert Installation from NLDOEC, Water Resources Management Division and any approvals required from NLDOEC and DFO.

The following measures will be implemented to minimize the potential impacts of stream crossings, if stream crossings are required:

a) During sensitive fish life stages, stream crossing activities will be undertaken under the direct supervision of the Site Manager.

b) Avoid the entry of deleterious substances including, but not limited to, materials such as sediment and fuel to watercourses and waterbodies during watercourse crossing work.

c) A minimum buffer of undisturbed natural vegetation must be left between the access road and the bank of any watercourse that it parallels. The buffer width will be determined through the formula:

Buffer width (m) = 20 m + 1.5 x slope (%) (Gosse et al. 1998)

d) In those locations within fish habitat, where culverts are required, application will be made to NLDOEC and DFO. The culverts used will be sized to handle the 1-in-25 year return period flood and will be constructed in accordance with the Environmental Guidelines for Culverts from the NLDOEC, Water Resources Division.

The following measures will also be implemented:

i) install culvert(s) in accordance with good engineering and environmental practices;

ii) unless otherwise indicated, all work should take place in dry conditions, either by the use of cofferdams or by diverting the stream;

iii) installation of cylindrical culverts shall be counter sunk only where necessary to protect fish habitat such that the culvert bottom is one-third the diameter below the streambed in the case of culverts less than 750 mm outside the diameter; for culverts greater than 750 mm outside diameter, the culvert bottom shall be installed a minimum of 300 mm below the streambed;

iv) in multiple (gang) culvert installations, install one culvert at an elevation lower than the others;

v) the natural low flow regime of the watercourse will not be altered;

vi) a culvert will not be installed before site specific information such as localized stream gradient, fish habitat type and species present have been evaluated. Culverts are to be installed using the guidelines provided in Gosse et al. (1998);

vii) riprap outlets and inlets to prevent erosion of fill slopes;

viii) use culverts of sufficient length to extend a short distance beyond the toe of the fill material;

ix) use backfilling material that is of a texture that shall support the culvert and limit seepage and subsequent washing out;

x) align culverts such that the original direction of stream flow is not significantly altered;

xi) remove fill and debris from the culvert area to a location above the peak flow level to prevent its entry into the stream;

xii) fill material shall not be removed from streambeds or banks; except when installing a culvert when removal of material is necessary for a flat foundation;

xiii) minimize and restrict the use of heavy equipment in and near watercourses; where possible, an excavator will be used from shore rather than a bulldozer in the watercourse. No work will be conducted within the waterbody unless approved by the appropriate Regulators;

xiv) as required, cofferdams of non-erodible material shall be used to separate work areas from the watercourse when excavating for culverts and footings, and

xv) cofferdams shall be removed upon completion of the construction phase and the streambed returned as closely as possible to its original condition.

e) When fording any watercourse, the Environmental Guidelines for Fording from NLDOEC, Water Resources Division 1992 will be applied in conjunction with the following:

i) areas of spawning habitat will be avoided;

ii) crossings shall be restricted to a single location and crossings made at right angles to the watercourse;

iii) equipment activity within the watercourse shall be minimized by limiting the number of crossings;

iv) all equipment will be mechanically sound to avoid leaks of oil, gasoline and hydraulic fluids;

v) no servicing or washing of heavy equipment will occur adjacent to watercourses; temporary fuelling, servicing or washing of equipment in areas other than the main fuel storage site will not be allowed within 100 m of a watercourse except within a refuelling site approved by Rambler, where conditions allow for containment of accidentally spilled fuels; remove from the work area and properly dispose of all waste oil, filters, containers or other such debris in an approved waste disposal site;

vi) stabilize the entire fording area using vegetation mats, corduroy roads or coarse material (125 mm diameter or greater), and the ford area is not natural bedrock, or is easily disturbed by fording; when the substrate of the ford area is not subject to easy disturbance by fording, or coarse material is not easily available within the lease boundaries, fording under existing substrate conditions may occur under the direction of the Site Manager;

vii) fording activities will not decrease the depth of the watercourses to less than 20 cm; where the existing depth is less than 20 cm, that depth shall be maintained;

viii) fording activities will be halted during high flow periods;

ix) stabilize all bank sections which contain loose or erodible materials; if banks must be sloped for stabilization, no material shall be deposited within the watercourse; sloping shall be accomplished by back-blading and the material removed shall be deposited above the high water mark of the watercourse;

x) all fording activities will comply with specific requirements and conditions detailed in the acquired approvals from the NLDOEC and DFO;

xi) to enable work in the dry, the flow of water must be diverted around the work area during the installation of a culvert (Gosse et al. 1998), and

xii) culverts should be marked to indicate their position under the snow.

4.11 Exploration Drilling

Environmental Concerns

Since 2005, Rambler has carried out exploration activities at the Ming Mine Site including extensive exploration drilling. This section is included in the event that further exploration drilling is carried out at the site. The environmental concerns with exploration drilling in and around the construction and development areas of the Ming Mine Site are potential surface disturbances, disposal of drilling fluids and cuttings, potential siltation, generation of dust, noise and the potential impacts on terrestrial habitats, air quality, aquatic ecosystems and historic resources.

Environmental Protection Procedures

a) Potential drilling sites in sensitive areas should be inspected prior to any drill site preparation by the Site Manager, whenever possible.

b) Vegetation will be cleared following the procedures detailed in Section 4.4.

c) Waste oil will be removed from the drill site and properly disposed of.

d) Water applications will be used to control dust where necessary. The use of water for dust control or lubrication during drilling will be undertaken in such a manner that runoff will not enter watercourses.

e) Water used throughout the drilling process will remain on the drill site. A Water Use Licence will be issued as part of the Approval for Exploration and Notice of Planned Mineral Exploration Work from the Water Resource Management Division. Every effort will be made to prevent turbid water from entering any watercourse.

f) Cuttings from drill activities will not be removed from the site; they will remain in the immediate location of drilling activities.

g) Drilling equipment will have muffled exhaust to minimize generated noise.

h) Fuel will be stored, handled and transported according to Section 4.15.

i) Garbage and solid waste will be removed from the drill site and deposited in an approved waste disposal area. Waste generated will be disposed of at an approved NL facility.

j) Due to the nature of drilling activities (i.e., quicksnaps and couplings) oil drops and leaks may occur and every attempt possible will be made to clean up the area. All rigs will be equipped with oil absorbent material in case of a leak or spill.

k) During the winter season, snow machines are to be used to transport drill materials, core and personnel to and from the drill sites.

l) Abandoned exploration drill holes will be temporarily capped or indefinitely sealed with appropriate material depending on the timing to allow for any necessary downhole testing. When all test work on the hole has been completed, it is permanently sealed.

m) Abandoned drill roads will be re-contoured to the natural grade of the land and, in some areas, hay and seedlings may be planted to encourage re-growth.

4.12 Pumps and Generators

Environmental Concerns

Pumps and diesel powered emergency power backup generators will be used at the Ming Mine and Nugget Pond Mill Site. Environmental concerns are associated with any potential accidental spills or chronic leaks contaminating soil and/or waterbodies, including groundwater.

Environmental Protection Procedure

a) To reduce fire hazards, fuel should not be stored immediately adjacent to generators, and the fuel storage area should be well ventilated. Fuel should not be stored within 100 m of waterbodies (Gosse et al. 1998).

b) All fuel storage containers are to have spill trays beneath with a potential capacity of 110% of volume. They should also be in a covered and secured area.

c) Drip pans are placed underneath pumps, nozzles and generators located near waterbodies.

d) Hoses and connections on equipment located near waterbodies are inspected routinely for leaks and drips.

e) All leaks are reported immediately to the Site Manager, and in turn to the Environmental Coordinator.

f) In addition to spill kits located at fuel storage tanks additional spill kits are located at designated central storage location(s). Personnel who deal with fuelling, fuel transfer and pumps and generators are trained in the use of the kits.

4.13 Dewatering Work Areas and Site Drainage

Potential Environmental Concerns

The major concern associated with site dewatering and drainage is potential siltation and direct fish mortality and/or habitat destruction for freshwater species. Additional concern exists with regard to interaction with the potentially acid generating waste rock and ore.

Environmental Protection Procedures

a) At the Ming Mine Site, all mine dewatering effluent and site runoff will be collected in the Ming West pit and directed to the WWTP before release into the environment.

b) At the Nugget Pond Mill Site, all run-off water and process water will be held and treated prior to release to the environment by way of the TMF.

c) At the Goodyear's Cove Port Site, wash water will be reused as much as possible using a grey-water collection system. Once the grey-water is non-reusable it will be trucked to the Nugget Pond site for recovery of concentrate and treatment within the tailings treatment system

d) Monitoring of site run-off will be conducted as per provincial requirements following effluent quality standards.

e) If silt is entering any waterbody, filtration or other suitable measures, such as silt fences and dykes will be provided to remove silt from, and reduce the turbidity of, water pumped from work areas before discharging.

f) If monitoring indicates regulated water quality standards are exceeded, Rambler will develop additional protocols in consultation with the NLDOEC.

4.14 Equipment Installation, Use and Maintenance

Environmental Concerns

A variety of vehicles and heavy equipment will be used. Environmental concerns associated with operating and using such equipment includes potential air emissions; accidental spills; and chronic leaks that may contaminate on-site water bodies, groundwater, and soil.

Environmental Protection Procedure

a) Equipment maintenance and fuelling activities will be performed at sites designated by the Site Manager and in compliance with applicable regulations.

b) Drip pans will be placed underneath pumps, fuel storage, and generators.

c) Hoses and connections on equipment will be inspected routinely for leaks and drips.

d) All leaks will be repaired and reported immediately to the Site Manager.

e) All fuel and other hazardous materials will be handled according to the procedures in Section 4.15.

f) In addition to spill kits located at fuel storage tanks additional spill kits will be located at designated central storage location(s). Personnel who deal with fuelling, fuel transfer and pumps and generators will be trained in the use of the kits.

4.15 Storage, Handling and Transfer of Fuel and Other Hazardous Material

Typical hazardous substances that may be used on site include, but are not necessarily limited to:

- petroleum, oil and lubricants;
- chlorinated and non-chlorinated solvents (*e.g.*, cleaner-degreasers);
- flammable gases (*e.g.*, acetylene);
- waste petroleum products (*e.g.*, used engine oil);
- process chemicals;
- corrosives (*e.g.*, battery acid), and/or
- glycol (*e.g.*, antifreeze).

Environmental Concerns

The primary concern with using hazardous substances is a potential uncontrolled release to the environment through spillage, and subsequent adverse effects on terrestrial and aquatic habitat and species, soil, groundwater quality, and human health and safety.

Environmental Protection Procedures

a) The *Workplace Hazardous Materials Information System (WHMIS) Regulations* under the *Occupational Health and Safety Act* will apply to all handling and storage of hazardous materials. All relevant current Material Safety Data Sheets (MSDS) will be readily available for the site.

b) All necessary precautions will be taken to prevent and reduce the spillage, misplacement or loss of fuels and other hazardous materials. In the event of a spill, the clean up procedures as outlined in the Fuel and Hazardous Material Spills Contingency Plan (Section 5.1) will be implemented. In the event of a reportable spill on-land or a spill, regardless of size, in the freshwater environment, the **Environmental Emergencies 24-Hour Report Line** will be contacted.

St. John's: **709-772-2083** or Other Areas**: 1-800-563-9089**

c) A spill is defined as reportable, depending on the class and quantity of dangerous goods involved, which varies between applicable Regulations:

- Reportable spill quantities for hazardous materials are listed in the Transportation of Dangerous Goods Act: Clear Language Regulations – Part 8.
- A reportable hydrocarbon spill is defined as loss of gasoline or associated products in excess of 70 litres in the *Storage and Handling of Gasoline and Associated Products Regulations, 2003.*

- The *Fisheries Act* requires all spills to be reported, regardless of size. Any spills in ditches or on roadways or in any other place that may enter waterways frequented by fish must also be reported.

d) A copy of the Rambler Contingency Plan (located in Section 5.1) for fuel and hazardous material spills will be readily available.

e) All fuel storage systems will be registered and comply with the *Storage and Handling of Gasoline and Associated Products Regulations*. Verification of the storage tank approval will be retained by Rambler.

f) Only workers who are qualified and trained in handling these materials as stated in the manufacturer's instructions and government laws and regulations will handle fuel and other hazardous materials.

g) Operators will attend the entire refuelling operations.

h) Fuel and other hazardous materials should be stored at least 100 m from any surface water (Gosse et al. 1998).

i) Handling and fuelling procedures will comply with the *Storage and Handling of Gasoline and Associated Products* and any additional requirements put forth by the NLDOEC in order to limit potential contamination of soil or water.

j) Fuel storage areas and non-portable transfer lines will be clearly marked or barricaded so that they are not damaged by moving vehicles. The markers will be visible under all weather conditions. Barriers will be constructed in compliance with the *Storage and Handling of Gasoline and Associated Product Regulations*.

k) Waste oils, lubricants, and other used oil will be retained in a tank or closed container, and disposed of in accordance with the *Used Oil Control Regulations*. Spill trays will be used and substances will be stored in a secured area/shed.

l) Fire and spill response materials will be kept nearby.

m) Despite measures taken to reduce the potential for spills or leaks, should any soils be contaminated by petroleum hydrocarbons, they will be assessed and managed in accordance with the *Environmental Protection Act.* All storage tank systems will be inspected on a regular basis by the operator as per Section 18 of the *Storage and Handling of Gasoline and Associated Products Regulations*. This involves, but is not limited to, gauging or dipping, reconciliation of records and the proper maintenance of reconciliation records for a period of two years.

n) Contracted fuel suppliers will, before transporting or positioning fuel or oil, have on file at Rambler a copy of their fuel and hazardous material spills contingency plan which is required under *Storage and Handling of*

Gasoline and Associated Products Regulations and which is acceptable to Rambler. The fuel and hazardous material spills contingency plan for Rambler is provided in Section 5.1.

o) Transportation of hazardous and dangerous materials shall be conducted in accordance with provincial, territorial and federal transportation regulations. Transportation documents shall be retained in a retrievable filing system and stored for the duration of the undertaking.

p) Smoking will be prohibited within 10 m of a fuel storage area.

q) Fuelling or servicing of mobile equipment will be conducted in designated areas and should not occur within 100 m of any body of water (Gosse et al. 1998).

r) Drum storage areas will not be located within 100 m of a water body (Gosse et al. 1998). Drums containing hydrocarbon or other hazardous materials will be transported, stored, handled and disposed of such that spillage or leakage does not occur. Drums will be tightly sealed against corrosion and rust and surrounded by an impermeable barrier in a dry building with an impermeable floor or outside with appropriate spill containment (110%) and covers. Rambler must approve the location of drum storage areas.

s) Small quantities of hazardous material (drums, cans and other containers under 20-L volume) will be stored in a secure location protected from weather and freezing, as well as vehicle traffic.

t) Where hazardous materials are to be stored outdoors, a designated area will be established, graded and fitted with an impermeable membrane covered with local soil and surrounded by an earth berm.

u) Within thirty (30) days of decommissioning of a storage tank system, the system will be emptied of all products, the tank and associated piping will be removed (including any contaminated soil) and the area will be cleaned and the site restored.

v) Decommissioning of any temporary storage tank system will be conducted according to the *Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products* (CCME 1994).

w) Hazardous waste will be moved to an appropriate hazardous waste storage area (refer to Section 4.19 for disposal). These areas are constructed in compliance with all applicable federal and provincial legislation.

4.16 Propane

Environmental Concerns

There are potential risks associated with propane storage and use. It is a flammable substance and poses potential threat as an asphyxiate to human and animals. In the liquid form, propane could potentially cause frostbite on skin contact. Propane containers could potentially explode if exposed to heat or fire.

Environmental Protection Procedures

a) Propane storage tanks will be installed as per manufacturer's specifications.

b) Tank maintenance schedules will be set and followed.

c) Tanks will be painted and free of corrosion and damages.

d) Areas surrounding propane storage tanks will be well ventilated and free of any possible ignition sources, and combustible materials.

e) Tanks will be grounded to avoid static accumulation.

f) Notification of use, volumes, etc. and a maintenance and Emergency Response Plan will be submitted in accordance with CEPA 1999.

4.17 Waste Disposal

Environmental Concerns

Waste (e.g., domestic and industrial wastes, grey water, paper, cardboard and wood), if not properly controlled and disposed of, will be unsightly and could potentially cause human safety and health concerns. It could also attract wildlife leading to the potential for human-wildlife conflicts. A comprehensive Waste Management Plan (WMP) will be developed for the Project under separate cover.

Environmental Protection Procedures

a) All solid waste will be handled according to the provincial *Environmental Protection Act*.

b) Waste will not be transported across the provincial boundary.

c) Domestic waste disposal will be managed by the Mine Contractor and will be transported offsite for disposal.

d) All solid waste materials shall be considered, prior to disposal, for reuse, resale, or recycling.

e) Solid waste produced by site personnel and operations will be collected and disposed of at an approved facility. For the Ming Mine Site, Ming's Bight and Baie Verte Municipal dumps are available for normal garbage disposal. Garbage from the Nugget Pond Site is currently disposed of at the Snook's Arm Municipal dumpsite and Rambler anticipates that this will continue. Garbage at the Goodyear's Cove Site will be in relatively small quantities and Rambler will seek approval from the municipal authority to deposit this material at their waste site.

f) Waste accumulated on site prior to disposal will be confined, so that it does not pose an environmental or health hazard.

g) Work areas will be kept clear of waste and litter to reduce the potential for attracting wildlife and reducing potential interactions with wildlife (see procedures in Section 5.2 for handling wildlife encounters).

h) Any waste that may attract animals (i.e., food) will be stored in covered, wildlife-proof containers.

i) Burning of waste is not permitted without appropriate permits.

j) All hazardous wastes generated will be handled according to the procedures for handling fuel and hazardous materials (Section 4.15).

4.18 Sewage Disposal

Environmental Concerns

The release of untreated sewage is a potential concern to human health, drinking water quality, and freshwater and marine ecosystems. Domestic sewage will be generated at all the Project sites.

Environmental Protection Procedures

a) At the Goodyear's Cove Site, sewage from lavatories will be collected by a licensed contractor and disposed in compliance with the Newfoundland and Department of Health guidelines, the *Lands Act*, Waste Management Regulations, 2003 under the *Environmental Protection Act* and the *Environmental Control Water and Sewage Regulations, 2003* under the *Environmental Protection Act*.

b) Sewage from the Nugget Pond Mill Site will be processed using the pre-existing Cromaglass sewage treatment facility before discharging to the Polishing Pond.

c) Sewage from the Ming Mine Site will be processed in an on site septic treatment system. Sewage will flow by gravity in buried pipelines to buried precast concrete chamber(s) for septic treatment. Treated effluent will flow downslope to a buried disposal field comprised of perforated piping above groundwater level into surrounding granular backfill soil material. It will be sized for the compliment of peak operations staff that may access the facilities. The design of the septic treatment system will ensure that leachate rates will meet provincial requirements for environmental protection. Surface access to the septic tank(s) will be provided for periodic solids removal using suction equipment.

d) If used, portable toilets will be located a distance of at least 25 m from any work site in a direction away from bodies of water and must be removed upon completion of construction activities.

4.19 Hazardous Waste Disposal

Environmental Concerns

The primary concern with the use or disposal of a hazardous substance is the potential for an uncontrolled release to the environment through leakage or accidental spillage, and subsequent adverse effects on terrestrial and aquatic habitat and species, soil, groundwater quality, and human health and safety.

Environmental Protection Procedures

a) All hazardous waste will be handled according to the provincial *Environmental Protection Act*. Waste classified as "hazardous" or "special" that cannot be disposed of in regular landfill sites will be sent for disposal to a licensed hazardous waste management company. Currently there are no approved hazardous waste facilities in Newfoundland; therefore any such waste will have to be moved outside the Province. The Transportation of Dangerous Goods (TDG) Regulations will apply to the movement of such waste.

b) All necessary precautions will be taken to prevent and reduce the spillage, misplacement or loss of fuels and other hazardous materials. In the event of a spill on-land or in the freshwater environment, refer to the Fuel and Hazardous Material Spills Contingency Plan (Section 5.1).

c) A copy of the Fuel and Hazardous Material Spills Contingency Plan will be present at hazardous material storage sites and fuel transfer locations.

d) Hazardous waste materials will only be handled by workers who are qualified and trained in handling these materials as stipulated in government laws and regulations.

e) Waste accumulated on site prior to disposal will be confined, so that it does not pose an environmental or health hazard.

f) Waste material will not be disposed of on-site or in a body of water.

g) Burning of waste is not permitted.

h) Where hazardous waste materials are to be stored outdoors, a designated area will be established, graded and fitted with an impermeable membrane covered with local soil and surrounded by an earth berm.

i) Waste oils, lubricants, and other used oil will be retained in an approved tank or closed container, and disposed of in accordance with the *Used Oil Control Regulations*.

j) Any soil contaminated by small leaks of oil or grease from equipment will be disposed of according to the *Environmental Protection Act*.

k) All hazardous wastes generated, by alternative treatments will be handled according to the procedures for handling fuel and hazardous materials (Section 4.15).

4.20 Vehicle Traffic

Environmental Concerns

Vehicular traffic can potentially result in fugitive dust, emissions and noise. Rambler is committed to the proper operation and maintenance of their own and/or contractor/subcontractor vehicles to reduce environmental effects. In order to minimize the effects of vehicular traffic on the general public, Rambler will post notices indicating that heavy duty vehicles will be in the area and will instruct vehicle operators to yield the right-of-way to the public, pursuant to vehicular traffic regulations. In addition, Rambler will provide training to mine workers on safe driving awareness, and monitor vehicle use.

Environmental Protection Procedures

a) All vehicle and equipment use, including use of ATVs, will be restricted to designated routes within and between work, laydown, maintenance and storage areas.

b) All site vehicles and equipment will be properly maintained to meet emission standards.

c) Travel in areas outside designated work areas will not be permitted.

d) All vehicles and equipment will yield to wildlife (see procedures in Section 5.2 for handling wildlife encounters).

e) All vehicles and equipment will yield to people, if present, and reduced speeds will be maintained on all roadways.

f) Chasing and/or harassing wildlife with vehicles and equipment will not be permitted.

g) Maintaining and refuelling vehicles will be restricted to designated areas (See Section 4.15).

h) Heavy equipment (e.g., dump trucks and front-end loaders) will only be used in work areas.

i) Access roads will be monitored for signs of erosion and appropriate action will be taken to repair roads, when necessary.

j) As required, dust suppression measures such as watering the roads will be implemented.

4.21 Dust Control

Environmental Concerns

The environmental concerns associated with dust include potential human health effects and potential effects on aquatic ecosystems and vegetation. At the Ming Mine site, potential sources of dust will be from the on-site roads and the ore trucks. At the Nugget Pond Mill Site, potential dust sources include the on-site roads and the ore trucks entering leaving the site as well as the loading of concentrate trucks to be transported to the port, the conveyor system as well as crushing operations. Ore trucks as well as conveyors loading the vessels will be potential sources of dust at the Goodyear's Cove Site.

Environmental Protection Procedures

a) Dust from operating activities will be controlled using water. In the event of excessive dust, water will be applied to travel and work surfaces.

b) Waste oil will not be used for dust control, but other agents such as calcium chloride may be used with the approval of the appropriate regulatory agencies.

c) Ore/concentrate transport trucks will be covered.

d) The conveyor system at the Goodyear's Cove Site will be covered.

4.22 Noise Control

Environmental Concerns

A variety of noises associated with Project activities can potentially cause negative effects on wildlife resources in terms of their distribution and abundance. As the Project sites are relatively remote from any dwellings, noise is not expected to affect local residents. Noise impacts on wildlife are likewise expected to be minimal.

Environmental Protection Procedures

Measures will be implemented wherever possible to minimize potential impacts arising from a variety of noise sources.

a) Adherence to all permits, and approvals.

b) All vehicles and generators will have exhaust systems regularly inspected and mufflers will be operating properly.

4.23 Road Maintenance

Environmental Concerns

Given the extensive existing infrastructure, the majority of the required roads exist for the Project; however minor upgrades may be necessary.

At the Nugget Pond Mill Site, all roads have been well maintained and are ready for use. Some minor adjustments to on-site roads and access may be required to accommodate new infrastructure. Similarly at the Ming Mine Site, only minor upgrading, placement of crushed gravel for driving surface, is anticipated for site roads. No road upgrades are planned at the Goodyear's Cove Port Site.

Erosion of road beds and siltation of watercourses may result from improperly constructed or upgraded roads. Road maintenance (e.g., snow clearing) activities may result in discharges to waterbodies.

Environmental Protection Procedures

a) See environmental protection procedures for Buffer Zones (Section 4.2), Clearing Vegetation (Section 4.4), Grubbing and Disposal of Related Debris (Section 4.5), Overburden (Section 4.6), Excavation, Embankment and Grading (Section 4.7), Erosion Prevention and Sediment Control (Section 4.8), Equipment Installation, Use and Maintenance (Section 4.14), Vehicle Traffic (Section 4.20), Dust Control (Section 4.21), and Noise Control (Section 4.22).

b) Snow clearing equipment will be inspected and maintained per Section 4.14.

c) Salt will not be used on roads for ice removal.

d) Roadbeds will be inspected on an annual basis for slumping and potholes.

e) All waste rock used to upgrade or construct site roads will be non-PAG material (Section 4.25).

f) Runoff will be collected and treated prior to release into the environment (Section 4.13). At the Ming Mine Site, runoff will be collected via drainage ditches and directed to the Ming West catchment pond, and then neutralized and treated at the WWTP before release into the environment. At the Nugget Pond Mill Site, all run-off water will be held and treated prior to release to the environment by way of the TMF.

4.24 Building Construction

Environmental Concerns

The environmental concerns associated with the installation and operation of buildings (including pre-fabricated buildings) include potential disturbance of wildlife due to installation noise and human presence, and potential impacts on water quality due to domestic waste and hazardous waste. Additional environmental concerns surround concrete production and placement associated with the building construction. Effluents may contain hazardous materials such as cement, concrete additives and form oil.

Much of the required building infrastructure currently exists at Nugget Pond to support the proposed undertaking; however some building construction is required, and is listed below.

Ming Mine Site

The new office/dry building for the mine site will occupy a footprint of approximately 1430 m^2. The building will be constructed on-site. The foundation will be concrete slab with 4' footings.

The new maintenance garage building, located on the main access roadway, shall be a steel framed, single storey building, occupying a footprint of approximately 360 m^2, with cast-in-place concrete foundations and interior slab on grade.

Nugget Pond Mill Site

The existing crushing and grinding circuit within the gold hydrometallurgical facility will be used to supply ground ore to the copper flotation. Therefore construction of the concentrator facility will be used to house all unit operations associated with the copper flotation circuit. The building extension will consist of spread and strip concrete foundation, concrete slab, and fabricated metal siding.

Goodyear's Cove Port Site

The concentrate storage building at Goodyear's Cove will be approximately 25 m wide by 50 m long and consist of a clear span pre-engineered steel structure supported on reinforced concrete foundations. The interior floor will be a reinforced concrete slab on grade. Reinforced concrete perimeter push walls will extend 2.4 m above the finished floor slab elevation.

Environmental Protection Procedures

a) Noise related to the construction of buildings will be temporary and will be minimized per Section 4.22.

b) Regular inspections of construction equipment will be performed (Section 4.14).

c) Form work and concrete placement procedures will be implemented to prevent the spillage of concrete to any waterbody.

d) Concrete additives, if required, will be stored in approved sealed containers.

e) Concrete production related washdown water (from the cleaning of concrete trucks, miscellaneous concrete equipment, etc) will be collected and properly handled prior to discharge (Section 4.13).

f) Run off from aggregate stockpiles will be collected and properly handled prior to discharge (Section 4.13).

g) Any PAG waste rock that is excavated to make way for building foundations at the Ming Mine Site will be transported to the waste stockpile area and eventually will be placed underground (Section 4.26).

h) Any PAG rock will not be used for aggregate (Section 4.26).

i) Domestic sewage from buildings at the Project will be processed and discharged according to Section 4.18 (Sewage Disposal).

j) Domestic waste will be controlled per environmental protection procedures in Section 4.17 (Waste Disposal).

4.25 Drilling and Blasting

Underground drilling and blasting will be conducted during the development and operational phases of the Ming Mine Site. Initially, blasting requirements will be provided by a blasting contractor. Once the mine is operating, appropriately permitted surface explosives storage magazines will be supplied, installed and monitored by explosives vendors/contractors.

Environmental Concerns

Potential environmental concerns associated with underground blasting include vibration and noise, dust generation, and the potential introduction of silt and ammonia into groundwater and into water bodies through mine dewatering effluent. Environmental concerns related to drilling are disposal of drilling fluids and cuttings, potential siltation, generation of dust, noise, air quality, and aquatic ecosystems.

As the drilling and blasting will be conducted underground, impacts at surface are expected to be minimal.

Environmental Protection Procedures

General Blasting Environmental Protection Procedures:

a) The contractor will conduct all blasting work in compliance with the appropriate permits and/or approvals and authorizations. All blasters will have a Blasters Safety Certificate and all blasting will be conducted in adherence to Rambler's safe work procedures and the Occupational Health and Safety legislation.

b) The contractor will obtain the appropriate approvals for all magazines for explosive.

c) The contractor will handle, transport, store and use explosives and all other hazardous materials in compliance with all applicable laws, regulations, orders of the Newfoundland and Department of Government Service (NLDGS) and NLDNR, and the TDG.

d) The contractor will use blasting patterns and procedures which minimize shock or instantaneous peak noise levels.

e) The contractor will not blast in the vicinity of fuel storage facilities.

f) The contractor will restrict use of explosives to authorized personnel who have been trained in their use.

g) The contractor will ensure that there are separate magazines on site for explosives and for dynamite blasting caps. It is planned that there will be separate magazine for caps and explosives. The cap magazine is in place from previous mine operations and will only need to be refurbished. The existing explosive magazine will need significant refurbishment or a new magazine will need to be constructed.

h) Where necessary, effluent from blasted areas will be monitored and sampled as per current operating Certificate of Approvals (C of A's). Effluent will be treated, if required, prior discharge.

i) All personnel must have been trained in the use of explosives and comply with safe blasting procedures established by Rambler.

j) The contractor will coordinate and schedule blasting activities to minimize the number of blasts required. In order to minimize the seismic effect, blasting patterns and procedures will be used to reduce the shock wave and noise.

k) The contractor will store explosives and auxiliary materials as stipulated in relevant legislation and in compliance with their operations permit and this EPP.

4.26 Waste Rock and Ore/Concentrate

Environmental Concerns

Given that the ore and waste rock mined from the Ming Mine Site and concentrate produced at the Nugget Pond Mill are potentially acid generating (PAG), it is important to design and operate the Project sites in a manner that minimizes the impact on the surrounding environment. Impacts from past operations at the Ming Mine Site are quite evident as vegetation has been destroyed and water quality has been impaired in areas on and around the site.

Both ore and waste rock will be stockpiled at the Ming Mine Site. During the pre-production period and early production stages, development waste rock will be hauled to surface and stored in the temporary Waste Stockpile. The Waste Stockpile pad will be constructed by clearing existing surface organic and waste materials to expose the underlying natural soils (glacial till). Once production begins and stopes are mined out, the development waste rock will be moved back underground into open stopes as backfill. Mined ore will be hauled to surface using mine haulage trucks and stored in a temporary transfer Ore Stockpile which will be capable of storing one week's production, or approximately 6,000 tonnes, of ore. Ore will be loaded from the stockpile directly to highway haul trucks and transported to Nugget Pond Mill. The stockpile area will be constructed by backfilling the existing, (historical) Ming West Open Pit with waste rock materials to an elevation above the flooded water level. As surface water drainage will come in contact with the stockpiled mine ore and waste rock, there is concern this water may become low pH and contain suspended solids and metal concentrations.

Ore and concentrate will be stockpiled at the Nugget Pond Mill Site. Approximately one week or 6,000 metric tonnes of ore will be stockpiled on surface to allow for continuous processing. Little, or no, acid generation is anticipated for the short time that ore will be stockpiled. The dewatered concentrate filter cake produced at the mill will be dumped in batches into a storage bunker under the filter press, within the flotation building. The concentrate will be loaded from this storage area using a front end loader on to trucks which will transport the concentrate to the Goodyear's Cove port storage facility. Concentrate handling will limit exposure to the environment.

Concentrate will be stored at the Goodyear's Cove Port Site at a total live storage capacity of 6,500 tonnes. Given shipments scheduled at approximately 4 to 5 times per year, very little acid generation is anticipated for the short time that the concentrate will be stockpiled.

Environmental Protection Procedures

Rambler plans to implement environmental controls to ensure operations are conducted in a manner minimizing the impact to the environment as much as possible. In general, the environmental controls are as follows:

Ming Mine Site

- Since some of the waste rock generated from underground development will be PAG, as much of this material as possible will be kept underground to minimize the environmental impact. Any waste rock that must be brought to surface will be stored within the proposed engineered waste stockpile area near the Ming West Pit. To avoid any long-term environmental liability all PAG material brought to surface will eventually be stored back underground to inhibit generation of acid.
- All waste rock used to upgrade or construct site roads will be non-PAG material (Section 4.23).
- An acid rock drainage (ARD) test program will be submitted to NLDNR for approval and carried out to ensure proper identification and separation of PAG and non-PAG materials. To be conservative all waste and ore materials are currently considered PAG for the purpose of planning, handling and storage requirements.
- Any PAG waste rock that is excavated to make way for building foundations will be transported to the waste stockpile area and eventually will be placed underground (Section 4.7).
- All mine water and site runoff (including that from the stockpile) will be directed toward to the Ming West catchment and processed through the WWTP (Section 4.13).

a) Continuous environmental monitoring and sampling of the effluent discharge water as well as surface water locations on and around the site.

Nugget Pond Mill Site

b) All site run-off (including from the ore stockpile) is to be directed to the TMF and therefore any minor amounts of low pH water will be captured and treated prior to release to the environment (Section 4.13).

Goodyear's Cove Port Site

c) Wash water will be reused as much as possible using a grey-water collection system. Once the grey-water is non-reusable it will be trucked to the Nugget Pond site for recovery of concentrate and treatment within the tailings treatment system (Section 4.13).

Transportation of Ore/Concentrate

During transportation of ore from Nugget Pond to Goodyear's Cove, and from the dock to the ship the following protection procedures will be implemented:

d) Ore at Nugget Pond and Goodyear's Cove is stored, loaded and off-loaded inside buildings and therefore any spillage will be contained.

e) Ore transport to Goodyear's Cove via haulage truck will be covered. In the event of a vehicle accident resulting in an ore spill the ore will be considered as a hazardous material and the spill contingency plan measures will be applied.

f) The conveyor from the port warehouse building to the ship will be covered therefore no spillage is anticipated.

4.27 Milling Activities

Environmental Concerns

The primary environmental concerns related to the processing activities at the Nugget Pond Mill surround the production and storage of potentially acid generating tailings. Other concerns include runoff, and particularly the runoff from the ore stockpiles. There are also environmental concerns related to the noises associated with ore processing activities its potential impacts of wildlife distribution and abundance, as well as dust control and its potential human health effects and potential effects on aquatic ecosystems and vegetation.

Environmental Protection Procedures

Measures to control dust and minimize noise will be implemented whenever possible to minimize potential impacts arising from milling activities.

a) All machinery used in ore processing will have exhaust systems regularly inspected and mufflers will be operating properly to minimize exhaust output and noise.

b) Dust from ore processing activities will be minimized per standard environmental protection procedures for dust control (see Section 4.21).

c) Noise from ore processing activities will be minimized per standard environmental protection procedures for noise control (See Section 4.22).

d) Waste oil will not be used for dust control. Water or other agents such as calcium chloride may be used with the approval of the appropriate regulatory agencies.

e) All tailings will be stored in the fully permitted TMF. In this system, tailings will be treated and then submerged to a minimum of one (1) meter in the tailings pond to curtail acid generation. Effluent discharged from the Tailings Pond enters and is held within the Polishing Pond prior to release to the environment. Monitoring of polishing pond effluent will be conducted as per provincial requirements following effluent quality standards.

f) Issues surrounding ore stored on site will be minimized as per the environmental protection procedures in Section 4.26.

g) All site runoff will be directed to the TMF and discharged and or pumped back to the mill for re-use as mentioned in Section 4.13. Therefore all stormwater is held and treated prior to release.

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5.0 CONTINGENCY PLANS

Contingency plans to address accidents and unplanned situations have been developed, and will be modified as required throughout ongoing construction and operation phases of the Project.

Contingency plans have been developed for the following potential accidental and unplanned situations:

- Fuel and Hazardous Material Spills (Section 5.1)
- Wildlife Encounters (Section 5.2)
- Forest Fires (Section 5.3)
- Discovery of Historic Resources (Section 5.4)
- Tailings Dam Failure (Section 5.5)
- Mine Rescue and First Aid (Section 5.6)

Notwithstanding the existence of these contingency plans, a policy to implement preventative measures as the first line of defence against the possibility of accidents will be adopted.

5.1 Fuel and Hazardous Material Spills

Environmental Concerns

Fuel and hazardous materials can potentially be damaging to vegetation, soil, surface water, ground water, wildlife, aquatic organisms, historic resources and human health and safety.

Environmental Protection Procedures

In case of a fuel or hazardous material spill, the following procedures will apply. **Please note that a detailed Contingency Plan is available at all sites to address hydrocarbon and hazardous materials spills – the information presented in this section is a quick reference guide only. Please refer to the site Contingency Plan as early as practical after a spill has been identified.**

a) The individual who discovers the leak or spill will make a reasonable attempt to immediately stop the leakage and contain the flow. Spill kits are located at fuel storage tanks and at designated central storage location(s).

b) Spill location, type of fuel or hazardous material, volume and terrain condition at the spill site will be determined and reported immediately to the Site Manager, who will report it immediately to Environment Canada. In the event of a reportable spill on-land or any spill regardless of size that may enter a waterbody frequented by fish must be reported immediately to the

Environmental Emergencies 24 Hour Report Line

709-772-2083 or **800-563-9089**

c) The spill occurrence shall be documented on the Spill Report Form provided in Appendix F.

d) A spill is defined as reportable, depending on the class and quantity of dangerous goods involved, which varies between applicable Regulations:

- Reportable spill quantities for hazardous materials are listed in the Transportation of Dangerous Goods Act: Clear Language Regulations – Part 8.
- A reportable hydrocarbon spill is defined as loss of gasoline or associated products in excess of 70 litres in the *Storage and Handling of Gasoline and Associated Products Regulations, 2003.*
- The *Fisheries Act* requires all spills to be reported, regardless of size. Any spills in ditches or on roadways or in any other place that may enter waterways frequented by fish must also be reported.

Required pertinent information includes:

i) name of reporter and phone number;

ii) time of spill or leak;

iii) time of detection of spill or leak;

iv) type of product spilled or leaked;

v) amount of product spilled or leaked;

vi) location of spill or leak;

vii) source of spill or leak;

viii) type of accident - collision, rupture, overflow, other;

ix) owner of product and phone number;

x) if the spill or leak is still occurring;

xi) if the spill or leaked product is contained, and if not, where it is flowing;

xii) wind velocity and direction;

xiii) temperature;

xiv) proximity to waterbodies, water intakes, and facilities, and

xv) snow cover and depth, terrain, and soil conditions.

e) The Site Manager will act as the "On-Scene-Commander" for the purposes of cleaning up a fuel or hazardous materials spill. The Site Manager will be familiar with spill clean-up procedures and mobilization procedures of the clean-up equipment. The Site Manager will have full authority to take necessary and appropriate action without unnecessary delay.

The overall responsibility of coordinating a clean-up and maintaining this plan current and up-to-date will be the Environmental Coordinator.

Staff will be trained on the procedures to follow in case of hydrocarbon spills as well as information related to general communication line. Rambler will provide personnel a responsibilities list before the start of construction and operation activities.

A complete list of spill response equipment will be generated and distributed on-site before the start of construction activities.

f) In reaching decisions on containment and clean-up procedures, the following criteria will be applied:

i) minimize danger to workers and public;

ii) protect water supplies;

iii) minimize pollution of watercourses;

iv) minimize area affected by spill, and

v) minimize the degree of disturbance to the area and watercourses during clean-up.

g) The Site Manager will act in consultation with the regulating authorities to:

i) assess site conditions and environmental impacts of various cleanup procedures;

ii) assess potential for fuel recovery versus burning;

iii) deploy on-site staff to mobilize pumps and empty 215-L drums or other appropriate storage containers to the spill site;

iv) deploy on-site staff to build containment dykes and commence pumping contaminant into drums;

v) apply absorbent as necessary;

vi) dispose of all contaminated debris, cleaning materials and absorbent at disposal location approved by the appropriate regulators for those materials, and

vii) take all necessary precautions to avoid the incident in the future.

h) The Site Manager will be responsible for the preparation of a written report which will be sent (as soon as possible, and no later than 30 days after the spill) to the Environmental Coordinator; and, from there to:

Derrick Maddocks
Director, Pollution Prevention Division
Department of Environment and Conservation
P.O. Box 8700
St. John's, NL
A1B 4J6
Telephone: (709) 729-2556
Facsimile: (709) 729-6969

and

Graham Thomas
Environmental Emergencies Coordinator
Environment Canada
6 Bruce Street

Mount Pearl, NL A1N 4T3
709 772-4285 (office)
709 687-5634 (cell)

5.2 Wildlife Encounters

Environmental Concerns

Wildlife encounters pose a potential risk for stress or injury to both the wildlife and site personnel. Control measures and environmental protection procedures have been put in place to reduce this potential risk to wildlife and humans. Hunting, trapping or fishing by construction and operations personnel is not permitted.

Environmental Protection Procedures

Prevention

The operator is responsible to see that the following procedures are implemented:

a) Site and working areas will be kept clean of food scraps and garbage.

b) Waste will be collected for disposal in appropriate containers and routinely transferred to the local landfill.

Response Actions

All construction/operations personnel will abide by the following rules in the case of wildlife encounters:

c) No attempt will be made by any worker at the project site to chase, catch, divert, follow or otherwise harass wildlife by vehicle or on foot.

d) Equipment and vehicles will yield the right-of-way to wildlife.

e) No hunting, fishing, and trapping staff policy will be implemented within the surface lease area of the sites.

f) No personal pets, domestic or wild, will be allowed on the site.

g) All personnel should be aware of the potential for encounters with bears, caribou, moose, etc. and they will be instructed to immediately report any sightings to the Site Manager. The Site Manager will notify the Environmental Coordinator to report any wildlife sightings and to assess actions for follow-up.

h) The Site Manager will be responsible for all actions in response to nuisance animals (e.g. bears) in the project area and will advise the Environmental Coordinator for further action.

i) Under provincial wildlife regulations, the displacement and release of any animal is the sole jurisdiction of the NLDOEC and is to be undertaken only under appropriate supervision.

j) If the nest of any bird is encountered during construction and operation activities, work in the vicinity of the nest is to be curtailed until the Environmental Coordinator is contacted and has had the opportunity to contact the Wildlife Division and appropriate mitigation is applied.

5.3 Forest Fires

Environmental Concerns

Activities related to construction and/or operations could potentially result in a fire, which could spread to the surrounding area. Such events could potentially be damaging to vegetation and wildlife, air and water quality, human health and safety, and Rambler assets.

Environmental Protection Procedures

Rambler or the contractor will take all precautions necessary to prevent fire hazards when working at the site. These include but are not limited to:

a) All flammable materials will be stored and handled properly.

b) Disposal of all flammable waste on a regular basis.

c) Rambler or the contractor making available, in proper operating condition, sufficient firefighting equipment to suit its labour force and fire hazards. Such equipment will comply with, and be maintained to the manufacturer's standards.

d) Rambler or the contractor ensuring that its personnel are trained in the use of such equipment.

e) In the event of a forest fire, Rambler or the contractor will take immediate steps to contain or extinguish the fire.

f) The Site Manager will appoint a supervisory staff member as “On-Scene-Commander” for fighting any forest fires.

g) Fires should be reported immediately to:

    i) the Rambler Ming Project Site Manager;

    ii) Springdale Forestry Office (709) 673-3821, and ultimately to the

    iii) Forest Management Unit Office in Corner Brook **709-637-2408**.

h) The following information will be provided:

    i) name of the reporter and phone number;

    ii) time of detection of the fire;

    iii) size of the fire; and

iv) location of the fire.

i) The police will also be notified immediately at:

709-532-4221 (Baie Verte RCMP Detachment).

5.4 Discovery of Historic Resources

Environmental Concerns

No historic resources have been discovered on the Project sites during their previous history of operations, and it is not anticipated that any will be found in the future planned operations; however, this section in included in the event that they may be in the future.

Historic resource material that is disturbed, destroyed or improperly removed from a site represents a potential cultural loss of information and history that could otherwise be handled and interpreted in an efficient and appropriate manner.

Environmental Protection Procedures

a) If suspected archaeological material is encountered, stop all work in the immediate area of the discovery until authorized personnel from Rambler, having consulted with the Provincial Archaeologist, permit resumption of the work.

b) Report the find immediately to the Site Manager.

c) Mark the site's visible boundaries. Personnel will not move or remove any artefacts or associated material unless the integrity of the material is threatened.

d) The Site Manager will report the find with the following information to the Provincial Archaeology Office, Culture and Heritage Division, Department of Tourism, Culture, and Heritage, St. John's, and comply with the instruction provided:

    i) nature of the find;

    ii) precise descriptive and map location and the time of the find:

    iii) nature of the activity resulting in the find;

    iv) identity of the worker(s) making the find;

    v) present location of the material, if moved, and any protective measures initiated for the material and the site, and

    vi) Extenuating circumstances.

5.5 Tailings Dam Failure

In the event of an effluent release, procedure have been developed and established and are detailed within the Rambler Ming Copper-Gold Mine Operations Emergency Response Plan (ERP) as per the Metals Mining Effluent Regulations.

The ERP for the Ming Copper-Gold Mine operations is a key element in protecting the environment within and surrounding the property. The ERP helps to ensure that any effluent releases to the environment are handled efficiently and safely, and in a manner that will minimize any environmental impact and satisfy the appropriate regulatory requirements.

Copies of the ERP are located throughout the site and distributed to all necessary departments.

5.6 Mine Rescue and First Aid

In the event that an incident occurs, procedures have been established and are detailed within Rambler's Ming Copper-Gold Mine Health and Safety ERP.

6.0 ENVIRONMENTAL PROTECTION PLAN CONTROL REVISIONS

Holders of controlled copies (i.e., the version which contains all of the up-to-date procedures) of the EPP are listed in Appendix B.

The EPP will be revised as necessary to reflect site-specific environmental protection requirements, and allow updates as work progresses. All EPP holders may initiate revisions by forwarding proposed revisions to the Site Manager and/or the Environmental Coordinator. The following information will be provided on the Revision Request Form (see Appendix C) for all revision requests:

- section to be revised;
- nature of the revision;
- rationale for the revision (i.e., environment/worker safety), and
- who submitted the revision request.

Approval for revisions will be sought from Rambler. When the Environmental Coordinator receives approval for the revision request, details of the revision will be distributed to all EPP holders and will be documented in the Revision History Log (Appendix D). Each revision will be accompanied by:

- revision instructions;
- list of sections being superseded; and
- an updated Table of Contents indicating the status of each section in the EPP.

When EPP Holders receive a revision, they will, within two working days:

- read the text of the revision;
- check the control sheet to confirm that all the listed pages have been received;
- remove and destroy the superseded pages from their copy of the EPP;
- insert the revised pages in the proper place in their copy of the EPP;
- page check the EPP, using the updated table of contents to confirm the EPP is complete and current;
- enter the revision number and date entered on the Revision History Log;
- incorporate the revision into the area of responsibility, as appropriate, and
- confirm that their personnel are familiar with the revisions.

7.0 CONTACT LIST

Rambler Metals and Mining Canada Ltd.

Corey Greenham
Environmental Coordinator
309 Highway 410
P.O Box 291
Baie Verte, NL A0K 1B0
Phone: (709) 532-4990
Fax: (709) 532-4992
Cell (709) 532-7337
Email: Corey@ramblermines.com

Tim Sanford, B.Sc., P.Eng.
General Manager
309 Highway 410
P.O Box 291
Baie Verte, NL A0K 1B0
Phone: (709) 532-4990
Fax: (709) 532-4992
Cell: (709) 532-6593
Email: tsanford@ramblermines.com

Mr. George Ogilvie, P.Eng.
President and CEO
309 Highway 410
P.O Box 291
Baie Verte, NL A0K 1B0
Phone: (709) 532-4990
Fax: (709) 532-4992
Email: georgeogilvie@ramblermines.com

ENVIRONMENTAL EMERGENCIES
24-HOUR REPORT LINE
St. John's (709) 772-2083
Other Areas 1-800-563-9089

ENVIRONMENT CANADA
- ENVIRONMENTAL PROTECTION
Mount Pearl, NL
Environmental Assessment Coordinator
Glenn Troke
Tel. (709) 772-4087
Fax. (709) 772-5097

Environmental Emergencies Coordinator
Graham Thomas
Tel. (709) 772-4285
Cell (709) 687-5634

ENVIRONMENT CANADA
- CANADIAN WILDLIFE SERVICE
Kim Mawhinney,
Manager
Canadian Wildlife Service
Mount Pearl, NL
Tel. (709) 772-7456
Fax. (709) 772-5097

Fisheries and Oceans Canada
4A Bailey Street, Suite 200
Grand Falls-Windsor, NL A2A 2T5
Tel: (709) 292-5197
Fax: (709) 292-5205

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Inland Fish and Wildlife Division
Kirsten Miller
Biologist
Corner Brook, NL
Tel. (709) 637-2029

NEWFOUNDLAND DEPARTMENT OF ENVIRONMENT AND ENERGY
Troy Duffy
Environmental Engineer
Pollution Prevention Division
Department of Environment and Conservation
35 Alabama Drive
Stephenville, NL
A2N 2K9
Tel. (709) 643-6114
Cell: (709) 639-3980

Springdale Forestry Office
Tel. (709) 282-6881

Forest Management Unit Office
Corner Brook, NL
Tel. (709) 637-2408

RCMP
Baie Verte Detachment
Tel. (709) 532-4221

8.0 REFERENCE MATERIAL

Canadian Council of Ministers of the Environment. 1994. Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products.

Department of Environment and Conservation, Water Resources Management Division. Chapter 3A. Environmental Guidelines for Stream Crossings by All-Terrain Vehicles.

Department of Natural Resources. Estimated 1995. Environmental Guidelines for Construction and Mineral Exploration Companies.

Department of Fisheries and Oceans. March 1995. Freshwater Intake End-of-Pipe Fish Screen Guideline.

DFRA (Department of Forest Resources and Agrifoods). 1998. Environmental Protection Guidelines for Ecologically Based Forest Resource Management (Stand Level Operations).

Gosse, M.M., A.S. Power, D.E. Hyslop, and S.L. Pierce. 1998. Guidelines for Protection of Freshwater Fish Habitat in Newfoundland and . Fisheries and Oceans, St. John's, NL. X + 105 pp., 2 appendices.

9.0 SIGNATURE PAGE

Rambler Metals and Mining Canada Ltd.

The undersigned certify that they have reviewed, and understand their role and responsibility regarding:

MING COPPER-GOLD MINE PROJECT

CONSTRUCTION AND OPERATIONS ACTIVITIES

ENVIRONMENTAL PROTECTION PLAN

As part of their Ming Copper-Gold Mine Project Safety Orientation.

_____ representing _____

Name (Printed) Company

_____ _____

Signature of above Date

_____

Name of Manager or Supervisor

_____ _____

Manager or Supervisor's Signature Date

APPENDIX A

LIST OF ABBREVIATIONS AND ACRONYMS

LIST OF ABBREVIATIONS AND ACRONYMS

DFO	Department of Fisheries and Oceans Canada
H&S	Health and Safety
TDG	Transportation of Dangerous Goods
WMP	Waste Management Plan
NLDNR	Newfoundland and Labrador Department of Natural Resources
NLDOEC	Newfoundland and Labrador Department of Environment and Conservation
NLDGS	Newfoundland and Department of Government Service
EPP	Environmental Protection Plan
Rambler	Rambler Metals and Mining Canada Ltd.
MSDS	Material Safety Data Sheet
WHMIS	Workplace Hazardous Materials Information System
tpd	Tonnes per Day
TMF	Tailings Management Facility
WWTP	Waste Water Treatment Plant
PAG	Potentially Acid Generating
C of A	Certificate of Approval
ARD	Acid Rock Drainage
EEM	Environmental Effects Monitoring
ERP	Emergency Response Plan

APPENDIX B

CONTROLLED COPY DISTRIBUTION LIST

CONTROLLED COPY DISTRIBUTION LIST

Department or Organization	Individual or Location

APPENDIX C

REVISION REQUEST FORM

SECTION TO BE REVISED:

NATURE OF REVISION:

RATIONALE FOR REVISION:

(i.e., environment/worker safety, etc.)

SUBMITTED BY:

Please submit request to the Rambler's Environment Team (Site Manager & Environmental Manager)

APPENDIX D

REVISION HISTORY LOG

REVISION HISTORY LOG

Version	Date Issued	Revision Notes
0.0	24 June 2010	Draft issued to Rambler
0.1	2 July 2010	Revised draft issued to Rambler
1.0	5 July 2010	Plan Issued to NLDOEC
1.1	9 November 2010	Revised and Issued to NLDOEC
1.2	13 January 2011	Revised and Issued to NLDOEC
1.3	18 February 2011	Final Issued to NLDOEC

APPENDIX E

SITE CHECK LIST FORM

Site Check List Form

Date : _____ Weather : _____

Activities: _____

Sediment and Erosion Control Structures Adequate Inadequate

Issues : _____

Resolutions : _____

Comments : _____

Environmental Inspector : _____ _____

(Please Print) (Signature)

Submit this report to the Site Manager or other designated personnel of responsibility within the employ of _____ (Contractor) upon completion.

Revision 0

APPENDIX F

SPILL REPORT FORM

Spill Report Form

1. Name: _____ (person reporting the spill)
2. Phone No.:_____
3. Time of spill or leak: _____
4. Time of detection: _____
5. Type of product (spilled or leaked): _____
6. Amount of product (spilled or leaked): _____
7. Location (of spill or leak): _____
8. Source (of spill or leak): _____
9. Type of accident - (check the correct response)

   ☐ collision ☐ rupture ☐ overflow ☐ other_____
10. Is the spill or leak is still occurring? ☐ Yes ☐ No
11. Is the spill or leaked product contained? ☐ Yes ☐ No

    if not, where it is flowing? _____
12. Are cleanup efforts already underway? ☐ Yes ☐ No
13. Wind velocity and direction: _____
14. Temperature: _____
15. Proximity to watercourses, sewers, and buildings/facilities:_____
16. Terrain: _____
    Soil conditions: _____
17. Name of person spill was reported to: _____

Submit this completed form to the Site Manager or other designated personnel of responsibility within the employ of _____ (Contractor).